

# **EDIUS SP**

## Installation Manual

EDIUS SP  
Installation Manual  
August 4, 2006  
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## Manual Explanation

- Information not described in this manual may be displayed in some cases. Make sure to read the text file attached to the disc.
- If there are any variations between the explanation in this manual and the actual application method, priority is given to the actual application method.
- The screens used as examples in this manual are those of the development stage, so they may vary from those in the final product.
- This manual is written for people who have a basic knowledge of how to use a computer. If there are no special instructions, perform the same operation as a normal computer operation.
- In this manual, EDIUS Pro version 4 and EDIUS series are called 'EDIUS'.
- In this manual, Microsoft® Windows® XP Professional operating system is called Windows XP Professional or Windows XP. Microsoft® Windows® XP Home Edition operating system is called Windows XP Home Edition or Windows XP.
- In this manual, Adobe Photoshop is called Photoshop, and Adobe After Effects is called After Effects.
- Adobe Premiere Pro is described as Premiere Pro in this manual.

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# Summary

# 1

## About This Manual

### Manuals in the Package

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#### EDIUS User Manual

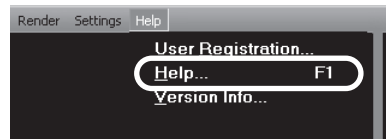
EDIUS editing workflow  
EDIUS functions

#### EDIUS Reference Manual

EDIUS operation

#### Help

EDIUS GUI descriptions  
About settings



Help is provided as 'Online help' displayed from the menu bar after starting up EDIUS.

#### EDIUS SP Installation Manual (This book)

Setup  
Using EDIUS  
Using Plug-Ins  
- This manual covers features exclusive in EDIUS SP. For operation procedures, please refer to the EDIUS User/Reference Manuals.

# 2

## Before Using

### Notices & Warranties

#### Notices & Warranties

##### Copyright Regulations

It is illegal for anyone to violate any of the rights provided by the copyright laws to the owner of copyright, except for fair use (mainly private noncommercial use). Also, in certain cases copying is prohibited with no exceptions. In no event shall Canopus be liable for any direct or indirect damages whatsoever arising from the use of captured materials.

##### Warranty

Your EDIUS SP options are covered by a limited warranty when you register your Canopus product. This warranty is for a period of one year from the date of purchase from Canopus or an authorized Canopus agent. This warranty applies only to the original purchaser of the Canopus product and is not transferable. Canopus Co., Ltd. warrants that for this period the product will be in good working order. Should our product fail to be in good working order, Canopus will, at its option, repair or replace it at no additional charge, provided that the product has not been subjected to misuse, abuse or non-Canopus authorized alternations, modifications and/or repair. Proof of purchase is required to validate your warranty.

Canopus is not responsible for any lost profits, lost savings or other incidental or consequential damages arising out of the use of, or inability to use, this product. This includes damage to property and, to the extent permitted by law, damages for personal injury. This warranty is in lieu of all other warranties of merchantability and fitness for a particular purpose.

## **DANGER**

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The following conditions indicate the potential for serious bodily injury or loss of life.

### **Health precautions**

In rare cases, flashing lights or stimulation from the bright light of a computer display or TV monitor may trigger temporary epileptic seizures or loss of consciousness. It is believed that even individuals whom have never experienced such symptoms may be susceptible. If you or close relatives have experienced any of these symptoms, consult a doctor before using this product.

### **Do not use in environments requiring a high degree of reliability and safety**

This product is not to be used in medical devices or life support systems. The characteristics of this product are not suited for use with such systems.

### **Protect against static electricity**

An electrostatic discharge may damage components of this product. Do not directly touch any of the connectors or component surfaces.

Static electricity can be generated on clothing and on people. Before handling the product, discharge static electricity from your body by touching a grounded metal surface.

### **Do not disassemble**

Do not remove the cover or modify the Product. Fire, electric shock or malfunction may result. For internal inspection or repair, please contact your system integrator or Canopus directly.

## **CAUTION**

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The following conditions indicate the potential for bodily harm, damage to hardware or loss of data.

### **Do not setup in areas subject to heat**

Do not setup in an area exposed to direct sunlight or near a heating apparatus. The heat can accumulate, causing burns, fire or damage. Also, the unit may become deformed or change color.

### **Only setup using the prescribed method**

Do not setup in a manner other than prescribed. Do not use while wrapped in cloth or plastic. Heat can accumulate, causing burns, fire or damage.

# FCC Notice

This equipment has been tested and found to comply with the limits for the class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed, and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on,the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# Declaration of Conformity

According to FCC Part 15

Responsible Party Name: Canopus Co., Ltd.  
Address: 1-2-2 Murotani Nishi-ku,  
Kobe-city Hyogo 651-2241 Japan  
Telephone: +81-78-992-5846  
Declares that product Model:SHX-E1  
Complies with Part 15 of the FCC Rules.

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## Operation environment

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### Notes

EDIUS operation is not necessarily guaranteed even in the environments satisfying all conditions below.

### PC

PC/AT Compatible (CPU: Intel Pentium 4 2.8GHz or larger)

(Xeon 2.8GHz Dual Processor (hyper-threading) recommended.)

- \* EDIUS complies with multi-processor and hyper threading technology.
- \* CPU supporting SSE instructions is necessary in operating EDIUS.

### PCI bus

The below PCI slots are required:

64bit/66MHz PCI (PCI Spec. Revision 2.2) x1

32bit/33MHz PCI (PCI Spec. Revision 2.2) x1

- \* You can also use two 32bit/33MHz PCI (PCI Spec. Revision 2.2) slots, if you are editing in SD resolutions only.

### Memory

1 GB or larger

### HDD

800 MB or larger space required for software installation.

Drive with ATA100/5400rpm or faster is necessary for video storage.

- \* Ultra 160 SCSI or faster is necessary to playback two or more streams in SD uncompressed.
- \* RAID0 is recommended for HD resolution editing.

### Graphics

Support for resolution of higher than 1024 x 768 dot/32 bit and overlay by DirectDraw off screen.

(Also supporting dual display)

128 MB or higher VRAM is required when using Xplode transitions included in EDIUS Pro4 in HD resolution. When editing in SD only, 64 MB or higher VRAM is required.

### Sound system

Support for WDM driver is required.

## CD-ROM

Required for software installation.

DVD-R/RW drive is required when creating DVD-Video with or without ProCoder Express For EDIUS.

## OS

Microsoft Windows XP Home Edition/Professional Service Pack2 or later

## Limitations

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Following are limitations to use EDIUS SP. Please also see the Readme text included in the installation CD-ROM for the latest information.

## Stand-by mode

Set stand-by mode for screen saver and monitor power supply to "OFF" when using this product.

# Support

## Customer Support

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For questions regarding hardware setup and usage, please contact your local Canopus office, distributor or the store where you have purchased this product.

## Canopus Web-site

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Including EDIUS, the latest company information is announced at our web-site:  
*<http://www.canopus.com/>*

The latest drivers utilities, product manuals, FAQs, etc. are also available at our web-site.

## Online User Registration

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You can register your EDIUS at the Canopus web-site.  
*<http://www.canopus.com/support/>*



# Chapter 1

## **Setup**

# 1

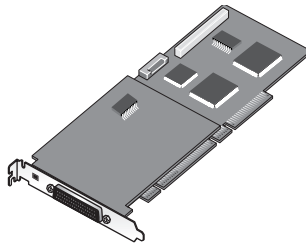
## Hardware setting

### Setting SHX-E1 boards

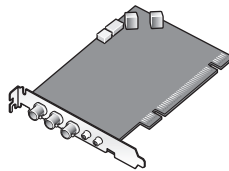
Before board setting, be sure that your work area is dust-free and dry. Prepare a Philips screwdriver, a slotted screwdriver and an empty box for removed screws.

Follow the steps below to install the following parts.

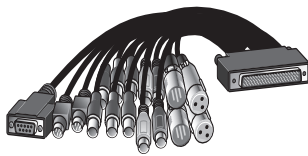
- Main board (SHX-E1)



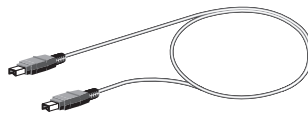
- Expansion board (HX-HD1)



- Multi I/O cable



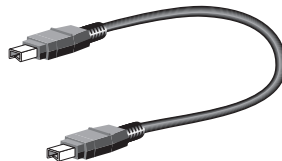
- DV Cable (4pin-4pin 2m)



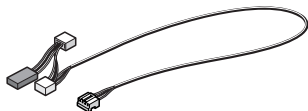
- Board connection cable (6pin-6pin)



- DV cable (4pin-4pin 30cm)



- Audio cable (4pin-4pin)



**1** Switch off your PC.

**2** Remove cables (including power cable).

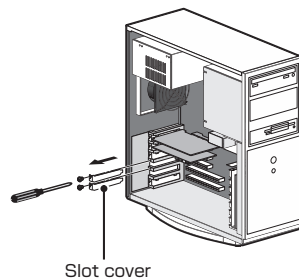
**POINT** Write down which cable was connected to which connector when removing.

**3** Remove PC cover.

Refer to the PC manual on how to remove.

**4** Remove slot cover of PCI slot positions to place main and expansion boards on.

Remove screw fixing slot cover with driver.



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## 5 Confirm the availability of the slots to set the EDIUS SP boards.

Slide main board in 64bit/66 MHz or 32bit/33MHz PCI slots. For HD resolution edit, use former one.

In case of setting main board (64bit/66MHz) and expansion board (32bit/33MHz) to the same 64bit/66MHz PCI bus, both boards will operate in 33MHz. Slide only main board in 64bit/66MHz PCI bus for HD resolution edit.

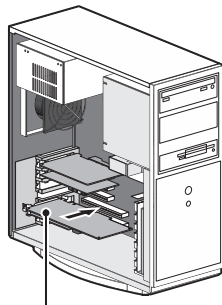
Internally connect main board and expansion board to use. Then internally connect soundboards to those boards. Read "Setting board" carefully to the last. Check the length of connecting cable in the package and decide the setting position of board.

- \* Prepare another cable in case that connector shapes differ between your soundboard and our contained audio cables.

**POINT** 64bit/66MHz PCI slot is longer than general 32bit/33MHz PCI slot.  
\* See the instruction manual of your PC (motherboard) for PCI slot type.

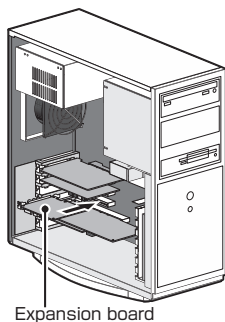
**POINT** Canopus board should fit in the PCI slot without using any force. If the board can not be inserted fully, please do not force in or bend any parts of the board. The board is designed to fit a standard PCI slot. If the board does not seem to fit when trying to insert, do not try to push in with excessive force. In this case, try other PCI slots, or contact your PC or motherboard manufacturer.

## 6 Tightly slide main board in PCI slot and fix the bracket temporarily.

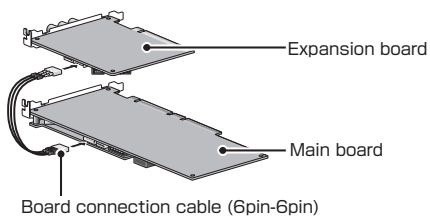


Main board

- 7** Tightly slide expansion board in PCI slot and fix the bracket temporarily.



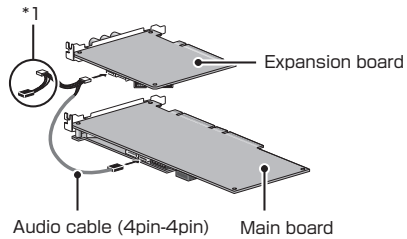
- 8** Connect main and expansion boards with board connection cable (6pin-6pin).



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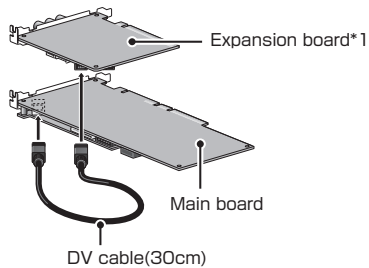
## 9 Connect main and expansion boards with the audio cable (4pin-4pin).

\* In case of connecting to another sound device, choose appropriate terminal among three. Prepare for another cable if contained audio cable does not fit connector shape of your sound device.



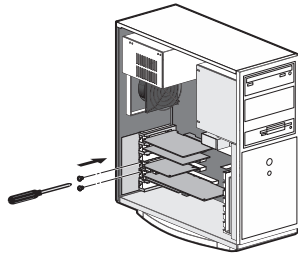
\*1 Do not use these two connectors with expansion board.

## 10 Connect main and expansion boards with the DV cable (30cm).



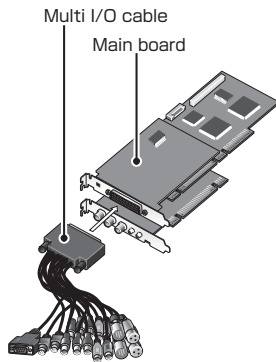
\*1 Either one of two DV terminals can be connected to expansion board.

**11** Screw in brackets of main and expansion boards.



**12** Put PC cover on.

**13** Connect multi I/O cable to main board. Tighten the screws of cable connector to firmly fix on main board.



**14** Connect other cables to your PC.

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## Audio output

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Specification of audio cable (4pin-4pin) is:

- Red: Right channel (R)
- White: Left channel (L)
- Black: Ground (G)



Audio cable (4pin-4pin)

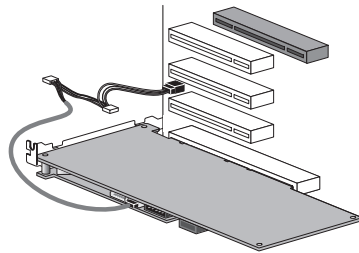
For audio output, use the attached audio cable (4pin-4pin) to connect sound device in output destination and the main board.

- \* Attached audio cable (4pin-4pin) branches off connectors with different type and wiring specification. Connect the side without branch to main board, and the side with branch to sound device in output destination. Use a connector that complies with the connector type and wiring specification for connecting destination. If you cannot use the attached audio cable (4pin-4pin), prepare another cable separately.

### Output from sound device on board

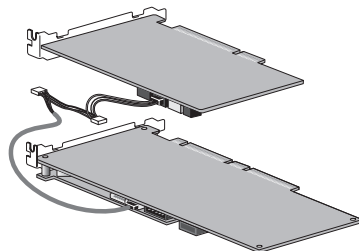
Connect the audio cable to the terminal of motherboard.

- \* Note that onboard sound device (sound device installed in motherboard: for details, see the instruction manual for your PC or motherboard) might interfere with the board installed in slot depending on connector position of the device.



### Output from sound board

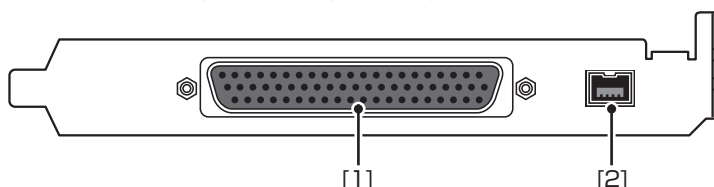
Connect the audio cable to the terminal of sound board.





# Parts name

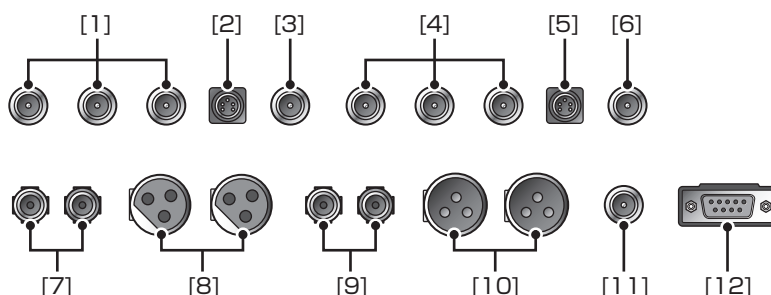
## Main board (SHX-E1) rear panel



[1] Special multi I/O cable terminal (D-Sub62pin)

[2] DV terminal (DV4pin)

## Special multi I/O cable connection terminals



[1] Component input terminal (BNC)

[2] S video input terminal (MiniDIN4pin)

[3] Composite input terminal (BNC)

[4] Component output terminal (BNC)

[5] S video output terminal (MiniDIN4pin)

[6] Composite output terminal (BNC)

[7] Unbalanced audio 2ch Input terminal (RCA)

[8] Balanced audio 2ch Input terminal (XLR)

[9] Unbalanced audio 2ch Output terminal (RCA)

[10] Balanced audio 2ch Output terminal (XLR)

[11] Reference input terminal (BNC)

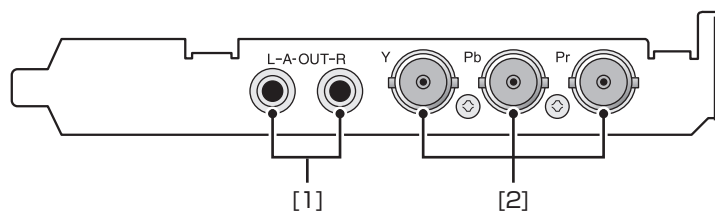
[12] Remote terminal (D-Sub9pin)

### Notes

When you connect the unbalance audio I/O terminal (RCA) for special multi I/O cable, be sure to firmly insert the terminal to the back (until click sound is heard).

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## Expansion board (HX-HD1) rear panel



[1] Unbalanced audio 2ch output terminal (RCA)

\* Can simultaneously be used with unbalanced audio output of main board.

[2] HD component output terminal (BNC)

# 2

## Installation/Uninstallation

### Installing EDIUS

#### Notes

- When you start up PC after setting up the board, 'Found New Hardware Wizard' appears. Select [Cancel] here.
- Before starting installation, close all the other applications that may be running in the task tray.
- Installation requires the account authorized for the administrator (such as PC administrator).
- In order to install, you must log in as a user with administrator privileges.
- For users of Our MVR series, install the driver and application software for those products in advance.
- When you use the plug-in for After Effects, PhotoShop and Premiere Pro, install those products in advance.
- Application to be installed may differ depending on model.
- Any preinstalled EDIUS before the version 4 is uninstalled on installing EDIUS Pro version 4. Before installation, create the customized setting file as a back-up, such as keyboard shortcuts and uninstall the preinstalled EDIUS.

#### 1 Set the EDIUS version 4 Installation CD into the CD-ROM drive.

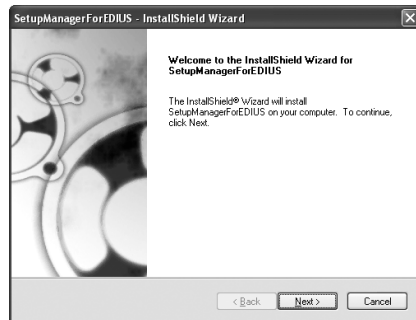
If the application does not start automatically, open the EDIUS version 4 Installation CD, and double-click "SetupManagerForEDIUS.exe".

"InputShield Wizard" dialog box appears.

#### POINT

When EDIUS before the version 4 is installed to PC, uninstall it along to the screen instruction and restart PC.

## 2 Click [Next].



## 3 Click [Yes] to agree the license agreement.



**POINT** If you don't accept the terms, click [No]. If you do not agree to the license agreement, you cannot use this product.

**Notes** Be sure of reading through terms and conditions by scrolling whole description.

## 4 Specify the user name, company name, and serial number, and click [Next].

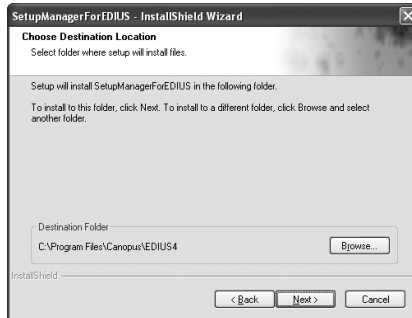


## POINT

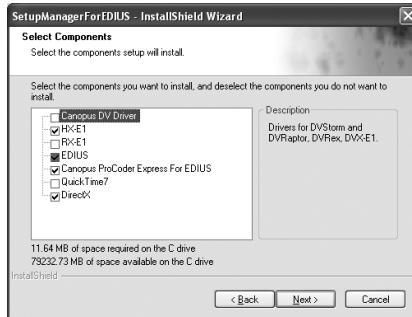
- Enter the serial number of 6 to 16 digits, which is pasted on the product package of the Installation CD.
- Please note that the serial number cannot be reissued. Keep the number securely.

## 5 Specify the folder to install EDIUS, and click [Next].

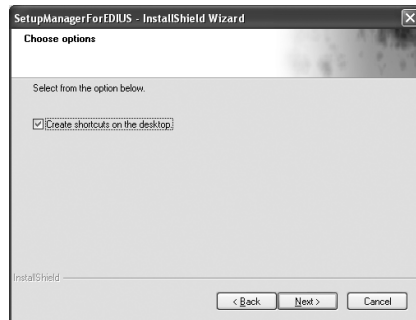
Click [Browse], and select the folder, to install in another folder.



## 6 Check on the component to install, and click [Next].



**7** Check "Create shortcuts on the desktop" and click [Next].



**8** Check the settings and click [Next].

Installation of EDIUS starts up.



**POINT** The following message may be added in the dialog box.  
"A graphic accelerator card with 128MB graphic memory is required if you wish to use Xplode EDIUS in HD resolution."  
This message appears when your graphic card does not fulfill the operating conditions for Xplode EDIUS in HD resolution edit.

- 9 Select "Yes, I want to restart my computer now" and click [Finish].



PC restarts. Installation of EDIUS is completed.

**POINT** USB key in the package stores the license for using EIDUS. Attach the USB key to the USB port of PC for using EDIUS. If the detection is completed properly, the message appears to notify that new hardware is found.

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# Installing TitleMotion Pro

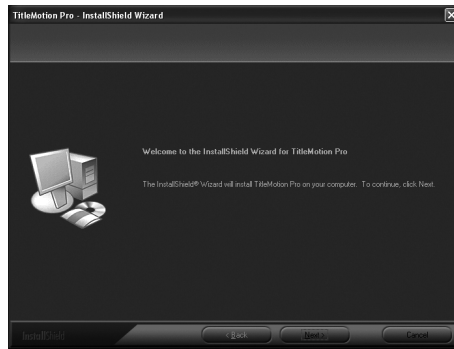
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TitleMotion Pro is the application software specific for the title creation. A variety of expression is available such as 3D text or animation. It implements 3 functions to create a title by switching each function according to the operation purpose.

**1** Set TitleMotion Pro for Canopus Installation CD into the CD-ROM drive.

"Input Settings" dialog box appears.

**2** Click [Next].



Installation of TitleMotion Pro starts up.

**3** Select "Yes, I want to restart my computer now" and click [Finish].



PC restarts. Installation of TitleMotion Pro is completed.



# Installing Bonus CD

Install attached application software if necessary.

## Bonus CD contents

The following contents are provided in Bonus CD.

Adorage	Adorage Canopus Edition 3D The transition pack (English version) is included. Various presets of animation 3D transitions are provided and you can also edit by yourself. Double-click "AdoCanopus1.exe" and follow the screen instruction to install.
DVCapture	DV capture tool that supports simultaneous capturing with 3 cameras, with maximum 2 cameras connecting to IEEE1394 ports (OHCI), and one connecting to DVStorm series, DVSTormXA or DVRaptorRT2. The function is also available to detect the border of the DV timecode and divide the file automatically. Double-click "AdoCanopus1.exe" and follow the screen instruction to install.
Imaginate2Demo	With a still image with the high resolution, try Imagine 2.0, the application software available for creating full-scale animation with easy operation. The trial version is valid for 15 days. Double-click "Install.exe" in "English" folder, and follow the screen instruction to install.
MPEG Capture	The software to import MPEG files via HDV devices by Canopus. After installation is completed, MPEG Capture can be started from "Capture" on the menu bar of EDIUS. Double-click "setup.exe" and follow the screen instruction to install.
SoundSoap	SoundSoap 2 VST Plugin is included. Delete/reduce the noise such as click, crackle, hiss, hum, buzz, or rambling of various media files. See the PDF manual provided for details.
Canopus Plug-ins for Adobe Software	Plug-ins for Adobe After Effects 6.5/7.0, Adobe Photoshop CS/CS2, Adobe Premire Pro 1.5 are included.
Keyboard Shortcut	Included files are the default shortcut key file, 'Avid shortcut for EDIUS.dat', 'EDIUS Pro3 shortcut.dat', and 'FinalCutPro shortcut for EDIUS.dat'.

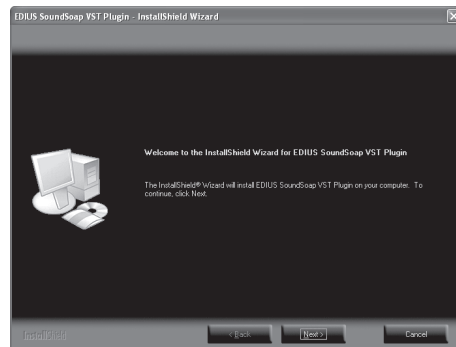
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# Installing SoundSoap

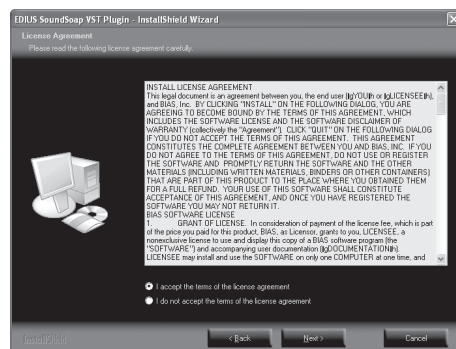
- 1 Set Bonus CD into the CD-ROM drive.
- 2 Open "SoundSoap" folder, and double-click "EDIUSSoundSoapVSTPlugin.exe".

"InputShield Wizard" dialog box appears.

- 3 Click [Next].

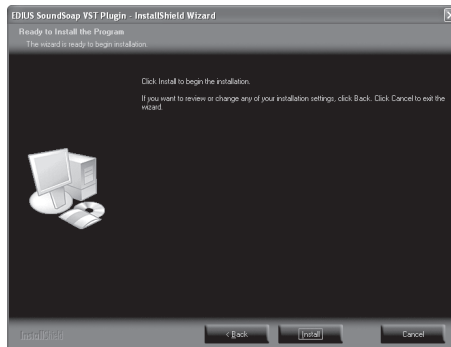


- 4 If you agree the license agreement, select "I accept the terms of the license agreement" and click [Next].



**Notes** Read through the license agreement by scrolling entire terms.

## 5 Click [Install].



"Authorize SoundSoap" dialog box appears. Apply the license authorization.

## 6 Click [Register Online].



## If you have already completed the registration

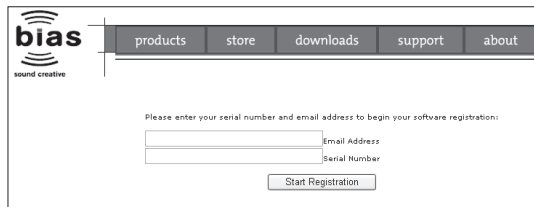
Enter your name, organization (such as the names of your company or division, and in blank for personal use), the serial number (the number started from BSS), and authorization code (delivered with a mail on registration), then click [Authorize].

Contact to the web-site below to confirm the authorization number by entering registered E-mail address and the serial number of SoundSoap, if you lost the delivered mail on the registration and the code.)

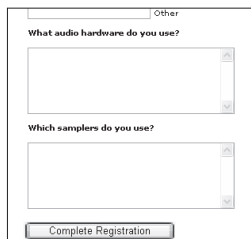
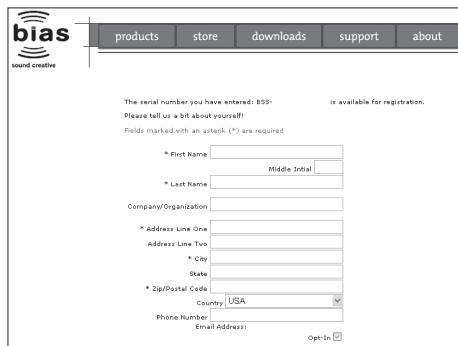
<http://www.bias-inc.com/support/register/>

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## 7 Enter the E-mail address and serial number, and click [Start Registration].



## 8 Enter the necessary information for registration, and click [CompleteRegistration].



Fields with \* are required to be input.

First Name

Last Name

Address Line One = Address

City = City or County

Zip/Postal Code

**POINT** If the screen appears to indicate "The Serial Number you have entered: BSS-xxxxxxxxxxxxxx has already been registered to the email address.", the registration has already been done.

**9** Change "Platform" to Windows, and click [Complete Registration].

The serial number you have entered: BSS- is available for registration.

Please select a platform, if applicable:

Product	Serial Number	Platform
SoundSoap 2	BSS-	Windows

Complete Registration

A mail is delivered from BIAS, Inc. to the E-mail address registered in step 7.

**10** Fulfill each item and click [Authorize].

Authorize SoundSoap

This copy of SoundSoap is in a time limited registration period until a Product Authorization Code is entered.

After you Register SoundSoap with BIAS, enter your serial number (located on your SoundSoap Owner's Certificate) and the Product Authorization Code BIAS sent back to you.

Name

Organization

Serial Number

Authorization

Still Waiting for Product Authorization Code Register Online ... Authorize

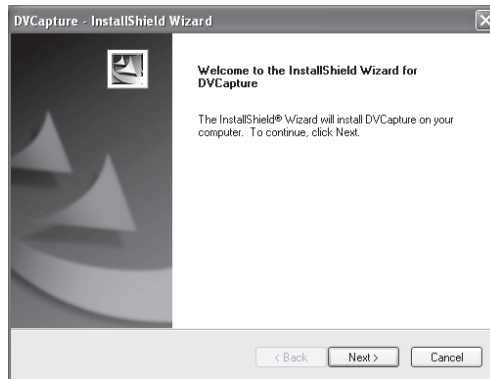
Enter your name, organization (such as the names of your company or division, and in blank for personal use), the serial number (the number started from BSS), and authorization code (delivered with a mail on registration).

**POINT** If you have applied activation and acquisition of Authorization Code on a different PC from the one you install EDIUS, enter Authorization Code in an E-mail sent to the PC.

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# Installing DV Capture

- 1 Set Bonus CD into the CD-ROM drive.
- 2 Open "DV Capture" folder, and double-click "CDVCap.exe".  
"InstallShield Wizard" dialog box appears.
- 3 Click [Next].



- 4 If you agree the license agreement, select "I accept the terms of the license agreement" and click [Next].



## Notes

Be sure to read through terms and conditions by scrolling whole description.

## 5 Specify file user name and company name and click [Next].

The screenshot shows the 'Customer Information' step of the DVCapture installation wizard. The window title is 'DVCapture - InstallShield Wizard'. The main heading is 'Customer Information' with the instruction 'Please enter your information.' Below this, a sub-instruction says 'Please enter your name and the name of the company for which you work.' There are two text input fields: 'User Name:' with the value 'Canopus' and 'Company Name:' with the value 'Canopus'. At the bottom left, it says 'InstallShield'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

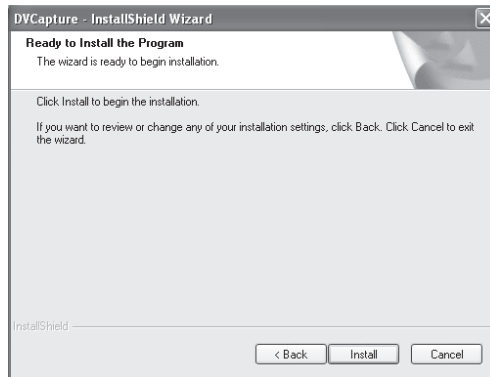
## 6 Specify the folder to install DV Capture, and click [Next].

Click [Change] and select the folder, to install in another folder.

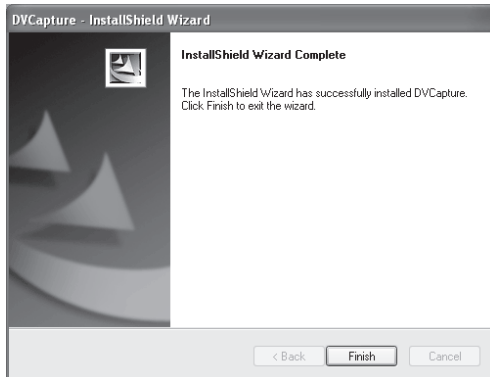
The screenshot shows the 'Choose Destination Location' step of the DVCapture installation wizard. The window title is 'DVCapture - InstallShield Wizard'. The main heading is 'Choose Destination Location' with the instruction 'Select folder where setup will install files.' Below this, there is a folder icon and the text 'Install DVCapture to: D:\Program Files\Canopus\DVCapture'. To the right of this text is a 'Change...' button. At the bottom left, it says 'InstallShield'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

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## 7 Click [Install].



## 8 Click [Finish].





# Confirmation after installation

## Confirming resource

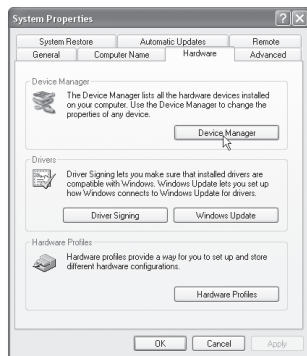
Confirm whether driver has been normally installed after restarting when driver and application software installation is finished.

\* In this section, the procedures are explained with EDIUS SP.

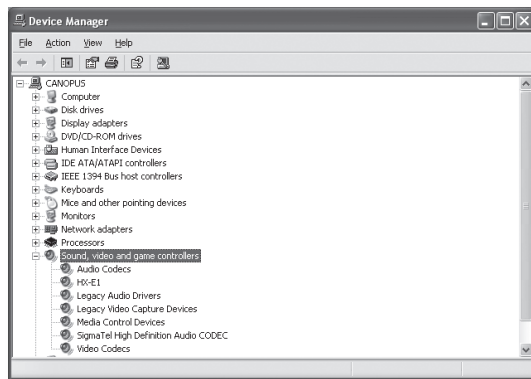
**1** Proceed to [Performance and maintenance] from [Control panel] of [start] menu and select [See basic information about your computer].

Or right click [My Computer] of [start] menu and select [Properties].

**2** Select [Hardware] tab and click [Device Manager].



**3** Double click [Sound, video and game controllers].



#### **4 Confirm the device name.**

EDIUS SP is displayed as "HX-E1" in Device Manager.

If you find ! or X mark at the top of device name, that means you failed installing HX-E1 driver.

Try installation again, check rival resource, or change board insertion position.

#### **5 Close [Device Manager].**

Checking the driver for the main board (SHX-E1) now finishes.

Next, check the driver for the expansion board.

#### **6 Start up EDIUS or ADVC Mode Controller and exit once.**

##### **POINT**

- For more information on how to start up EDIUS, see "Starting EDIUS" "EDIUS Pro4 User Manual" .
- For more information on how to start up ADVC Mode Controller, see "Using ADVC mode" P110.

#### **7 Referring to steps 1 and 2, open [Device Manager].**

#### **8 Double click the following items to check that the driver is installed.**

- [IEEE 1394 Bus host controllers]

Device-[NEC OHCI Compliant IEEE 1394 Host Controller]

- [Imaging devices]

Driver-[AVC Compliant DV Tape Recorder/Player]

- [Network adapters]

Driver-[1394 Net Adapter]

\*#2 of [AVC Compliant DV Tape Recorder/Player#2] or [1394 Net Adapter #2] may appear when connecting and disconnecting boards several time.  
Display description varies depending on your environment.

#### **9 Close [Device Manager].**

## When resource competes

EDIUS will not operate normally if your and other devices compete or share PC resources. Try following solution.

- Remove other device that share interrupting or change IRQ of other device.
- Change resource setting with BIOS of PC or motherboard. See instruction manual of PC or motherboard since BIOS setting method varies by manufacturer.

**POINT** IRQ set method varies depending on PC or motherboard manufacturer. Some types assign arbitrary IRQ to each PCI/PCI Express slot with BIOS, other types program special IRQ in advance

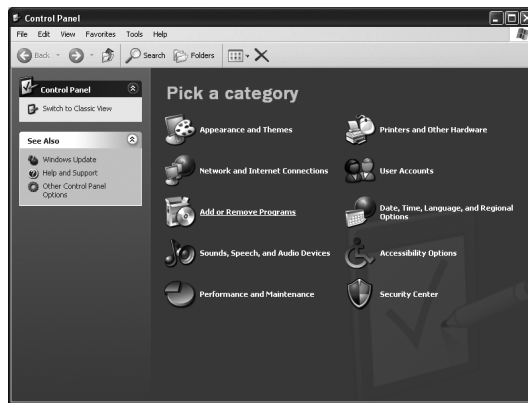
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# Uninstallation

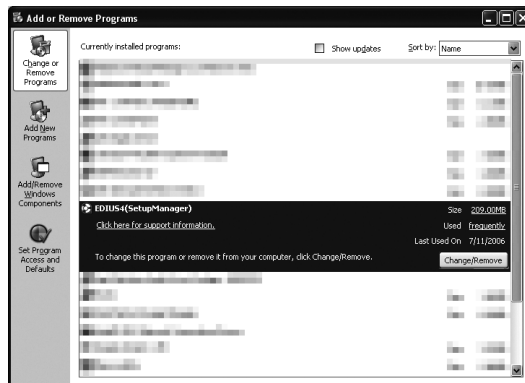
## Uninstalling driver and application software

- Notes**
- Before starting uninstallation, close all the other applications that may be running in the task tray.
  - In order to uninstall, you must log in as a user with administrator privileges.

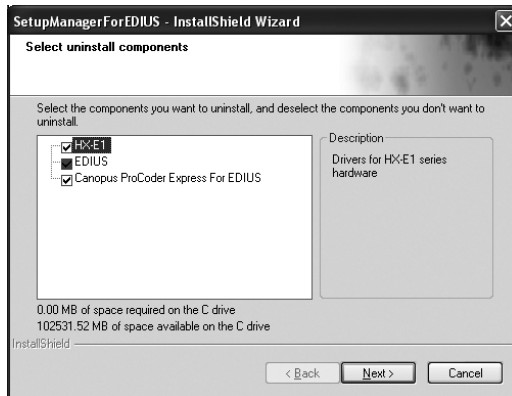
- 1 Select [Control Panel] from [start] menu and click [Add or Remove Programs].



- 2 Select [Edius 4(SetupManager)] and click [Change/Remove].

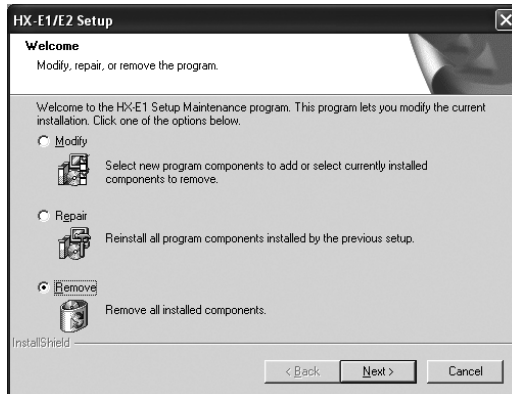


### 3 Click [Next].



Uninstallation starts.

### 4 Select [Remove] and click [Next].



**Notes** If [Locked File Detected] dialog appears, click [Ignore].

### 5 Select [Yes, I want to restart my computer now.], and click [Finish].

The computer will reboot. Uninstallation is completed.

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# 3 License Transfer

## Transferring license

When you are using EDIUS on a laptop PC where the numbers of USB ports are limited, or when you don't want to carry USB key, consider transferring EDIUS licenses. Make sure to read and understand the following notes before transferring licenses.

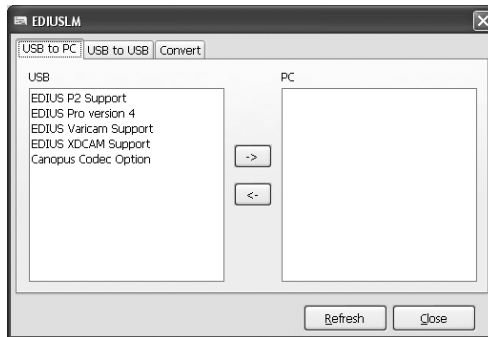
- Notes**
- \* The license transfer tool must be executed on a PC where EDIUS has been installed.
  - \* When you close the license transfer tool, make sure that the transferring procedures of license have been completed. If you close the tool while it's processing, your EDIUS license may be lost.
  - \* Please note that the USB key cannot be reissued no matter what the circumstances (even when the license information exists on a PC). Keep the USB key securely.
  - \* License can only be transferred between PC and USB key, or between USB and USB. It can't be transferred from a PC to another PC.
  - \* If you have transferred the license to a PC, there is a possibility that the license may be lost because of the malfunction of a hard disk drive or any other reasons. We recommend that you should not transfer the license to a PC unless there is a compelling reason.
  - \* Note that when you have transferred the license to a PC, the registered license data may become invalid if you change the hardware (CPU, Memory, Motherboard, HDD, NIC, etc) configurations.

## Using License Transfer tool

- 1 Set the USB key that contains the licenses you want to transfer to a USB port of a PC.
- 2 Set the EDIUS version 4 Installation CD into the CD-ROM drive.

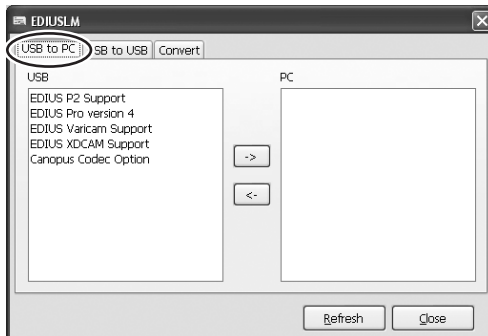
### 3 Open "Tools", "EdiusLM" and double-click "EdiusLM.exe".

[EDIUS LM] dialog appears.



## Transfer between a USB key and a local disk of a PC

### 1 Click [USB to PC] on the "EDIUS LM" dialog.



### 2 Select the license to transfer and click [->].

- To transfer from a PC to a USB key, click [-<].

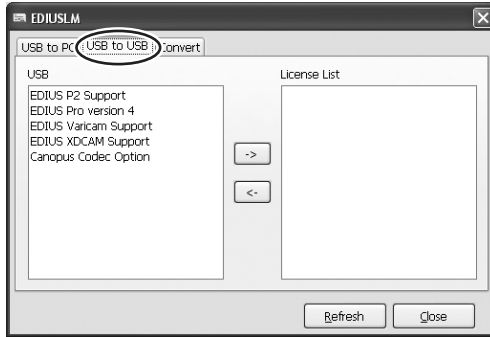
### 3 Wait until the license is transferred, and click [Close].

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## Transfer between a USB key and another USB key

---

- 1 Click the "USB to USB" tab on the "EDIUS LM" dialog.



- 2 Select the license to transfer and click [->].
- 3 Remove the USB key, set the USB key to transfer the license to, and then click [Refresh].

### Notes

- \* Make sure to remove the USB key where the license had been stored, before setting the destination USB key.
- \* When you change the USB keys, do not fail to click [Refresh] in order to update the License list.

- 4 Select the license and click [<-] to transfer it to the new USB key.
- 5 Wait until the license is transferred, and click [Close].

### Notes

- \* Do not remove the USB key when the licenses are being transferred.
- \* To transfer licenses, make sure to replace USB keys step by step.



## Chapter 2

# Using EDIUS

# 1

## Using HDV video

You can use EDIUS to capture and edit HDV video.

Approximately 13GB of file space is required to capture HDV MPEG file<sup>\*1</sup> for an hour. When you plan to edit the captured MPEG file, we recommend capturing in HQ AVI file\* where you have better realtime editing performance (HQ capture function). Note that you would require more hard disc space because HQ AVI file size is approx. 7times larger than MPEG file size. Also HQ capture has a minimum system requirement for CPU power.

- HQ capture system requirement:

Minimum: Intel Pentium 4 3.0 GHz (with HT support) or higher

Recommended: Intel Pentium D 3.0 GHz (Dual core, EM64T) or higher

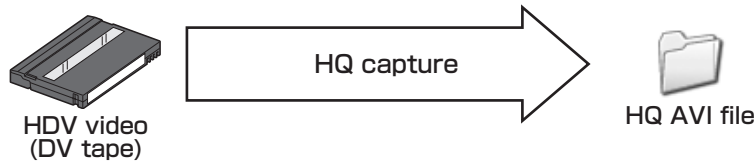
Recommended: Intel Xeon 2.8 GHz (with HT support) x 2

If your system is not capable of HQ capture, you need to capture in native HDV first, then convert the file to HQ.

<sup>\*1</sup> Native MPEG (MPEG-TS format) file. It is described as MPEG file in this section.

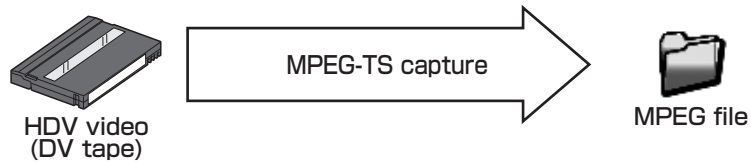
\* File encoded using the Canopus HQ Codec.

### Capturing in HQ AVI file

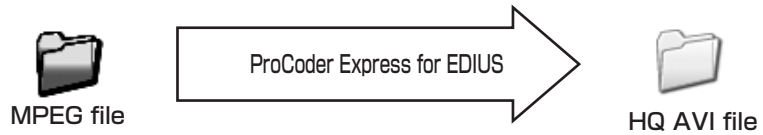


\* Mind the HDD space.

## Capturing in MPEG (MPEG-TS format) file

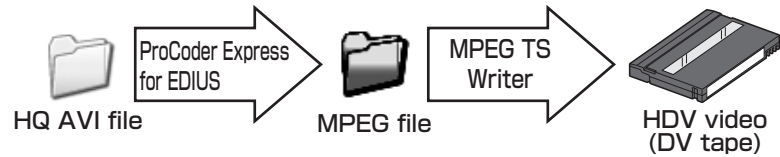


## Convert MPEG (MPEG-TS format) file to HQ AVI file



\* Mind the HDD space.

## Exporting a file to HDV device



**POINT** For more information, see your "EDIUS Pro 4 User manual".

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# 2

## Setting EDIUS

### POINT

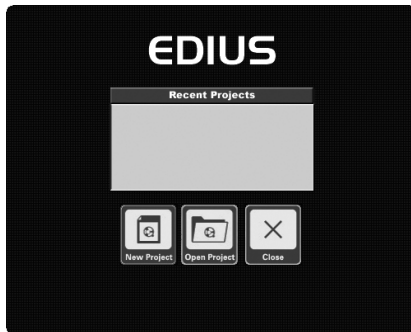
#### About the USB Key

When using EDIUS, please plug in the USB key to the USB port on your PC. If the USB key is not attached, EDIUS will run in a 30 day trial mode. To use EDIUS without attaching the USB key, please refer to the "License Transfer" section in the Installation Guide manual.

## Project Setting

The [Project Settings] dialog box appears when you start up EDIUS. This dialog explains how to set output device and codec corresponding to your VTR and editing format.

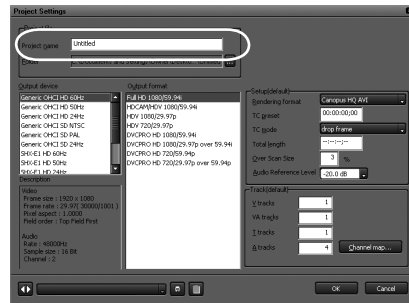
- 1 Start up EDIUS, and click [NewProject].



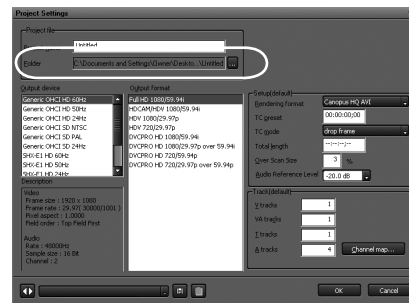
The [Project Settings] dialog box appears..

## 2 Enter the project name in [Project name].

You can change the project setting contents during editing Videos.



## 3 When you change the working folder, click [...] to select the desired folder in the [Browse For Folder] dialog box.



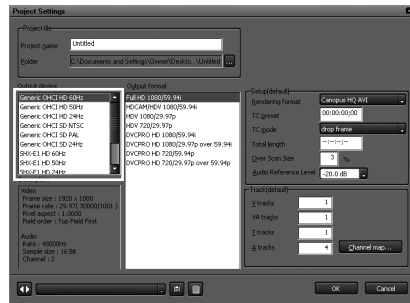
### POINT

We recommend you should create a folder in a hard disk where the Windows system is not installed (2nd hard disk) for efficient operation.

## 4 Select [Output device].

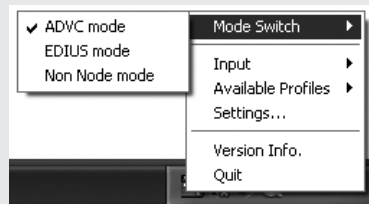
Select [SHX-E1 xxx] when you output realtime video during editing, import the analog video/audio or DV/HDV video, or export to tape after editing.

Select [Generic OHCI xxx] when you edit HDV video without setting the expansion board. Use this device if you need to edit videos only with an IEEE1394 interface which has been installed to your PC and the overlay function of your PC.



**POINT** For more information on selecting the output device, see "Preset List" P125.

**POINT** ADVC Mode Controller is software which becomes available when you set the expansion board. It resides in task tray whenever you start. You can switch the operation mode from the right-click menu of task tray.

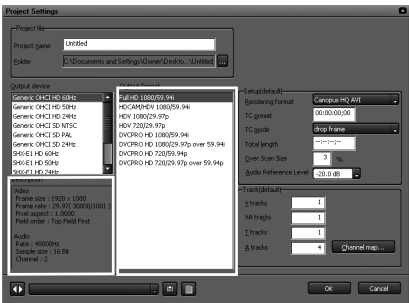


When you use [SHX-E1 Output] as the output device, use ADVC Mode Controller in [EDIUS mode].

**POINT** For more information on ADVC Mode Controller, see "ADVC Mode Controller functions" P110.

5 Select presets from [Output format].

Selectable presets vary depending on the output device.



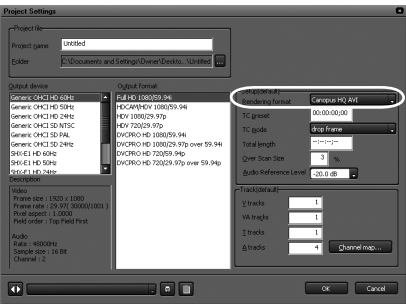
Details on the preset is displayed in [Description] area.

**POINT** HD presets are not available if the expansion board is not installed.

**POINT** For items not indicated in this manual, see the "EDIUS Pro 4 User Manual".

6 Check [Rendering format].

\* Rendering format (Codec) corresponding to presets will automatically be selected. Change it if necessary.



When you execute rendering in EDIUS, a temporary file is created. Set the video codec for this temporary file in [Rendering format].

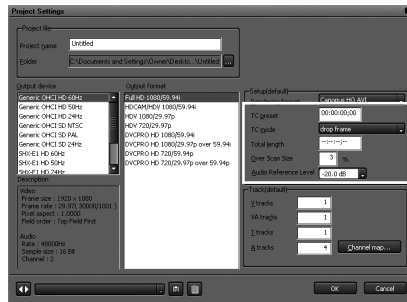
The recommended codec allows the best realtime performance while keeping the image quality.

**POINT** [Rendering format] in the [Project Settings] dialog box has nothing to do with the codec used capturing. Rendering process on the EDIUS timeline uses the codec set in the [Project Settings].

## POINT

- For more information on the recommended codec, see "Preset List", P125.
- For more information on HDV editing, see "Using HDV video", P42.
- For more information on codec features, see "Codec", P122.

## 7 Set [TC preset], [TC mode], [Total length], [Over Scan Size] and [Audio reference Level].



TC preset	Set the timecode for the top of timeline.
TC mode	Set drop/non-drop frame for timecode in NTSC (29.97fps) system.
Total length	Set the total length if it's fixed. Set this option to change the color of a part of timeline which exceeds total length for your notice.
Over Scan Size	Enter the ratio for over scan display. The value must be in the range of [0] to [20]. Enter [0] not to display over scan.
Audio Reference Level	Specify the sampling value to work as the gauge [0] when the indicator is set to [Audio Reference scale] in [Audio mixer] dialog.

## POINT

### Over Scan Size

Outside of the over scan area you set here will be invalid area and become beyond the applied range of transition effect, etc. When you want to make all area of created video data valid for using, enter [0] for over scan size.

For example, when there is invalid area (black frame) at the edge of screen for video clip to use, you can set so that invalid area should be displayed outside of over scan area. This setting enables to exclude invalid area from transition effect, etc.



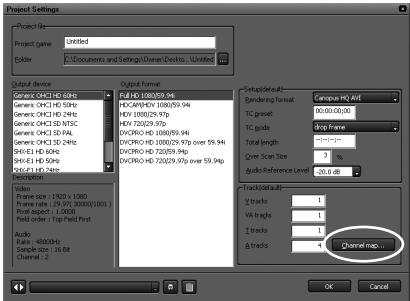
8 Set the number of video, audio and title track in [Track] field.

Set the number of track on the timeline. You can increase or decrease the number of track during editing operation.



9 Click [Channel map]. Set mapping for the audio timeline and the audio output signal to output.

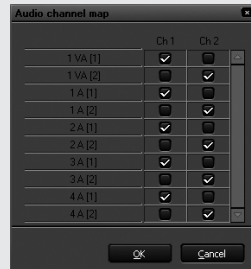
Use the [Audio channel map] dialog box to set the audio channel output and the output destination of VA track and A track on the timeline.



## POINT

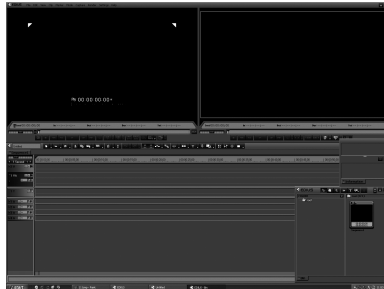
### When setting [DV 59.94i 4:3, 48kHz]

For example, when you select [DV 59.94i 4:3, 48kHz] setting, the preset audio channel will be 2ch. While there are 2 output channels, there are as many audio tracks as to have been set in [Project Settings] dialog, including 1 VA track and A tracks. Each audio related track has 2ch (L/R). When you set the relationship between the existing 10ch audio output and the preset 2ch audio output in the [Audio channel map] dialog box as below, audio 2ch (L/R) placed in VA track and A track will be output to Ch1 and Ch2.



## 10 After completing the settings, click [OK].

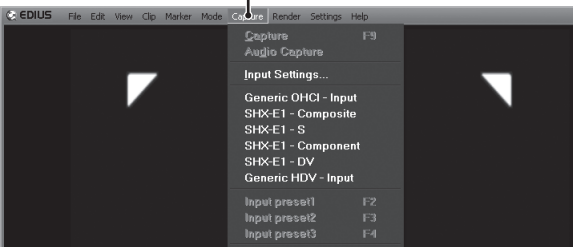
The dialog box closes and EDIUS editing screen appears.



# Capture

Do not plugin or disconnect cables (IEEE1394 cable, USB cable) while using EDIUS.

- 1 For capturing, select the input device from the [Capture] menu.  
[Capture] menu

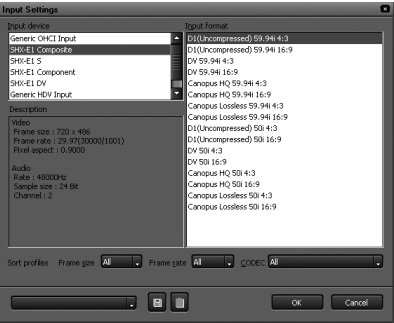


You can also select [Input Settings] and select [Input device] in the [Input Settings] dialog box.

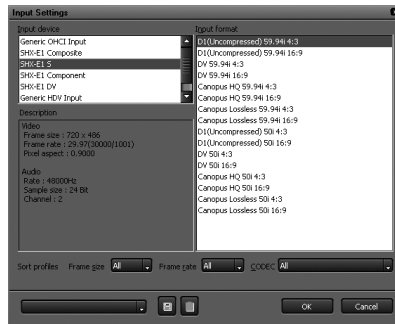
- 2 Select codec in the [Input Settings] dialog box and click [OK].

**POINT** For more information on capture operation, see "EDIUS Pro4 User Manual".

Select [SHX-E1 Composite] for composite input; [SHX-E1 S] for S-Video input. Select preset codec in the [Input Settings] dialog box.

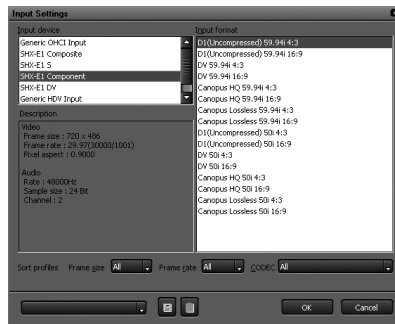


SHX-E1 Composite



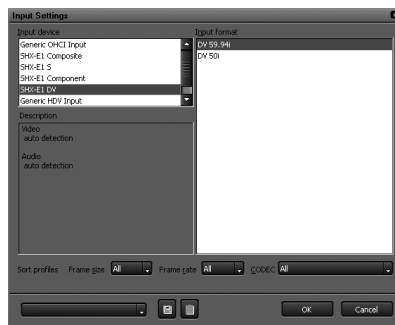
## SHX-E1 S

Select [SHX-E1 Component] for component input.



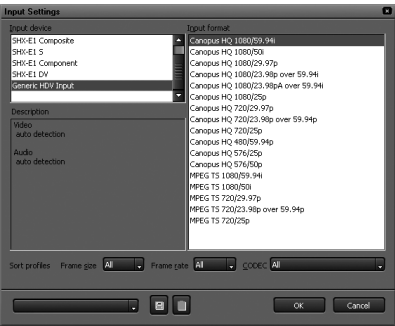
## SHX-E1 Component

When you use IEEE1394 interface in the main board, select [SHX-E1 DV] .



## SHX-E1 DV

To capture in HDV format, select [Generic HDV Input].



### Generic HDV Input

**POINT** For more information on HDV editing settings, see “Using HDV video” P42.

When you use the OHCI compliant IEEE1394, select [Generic OHCI Input].



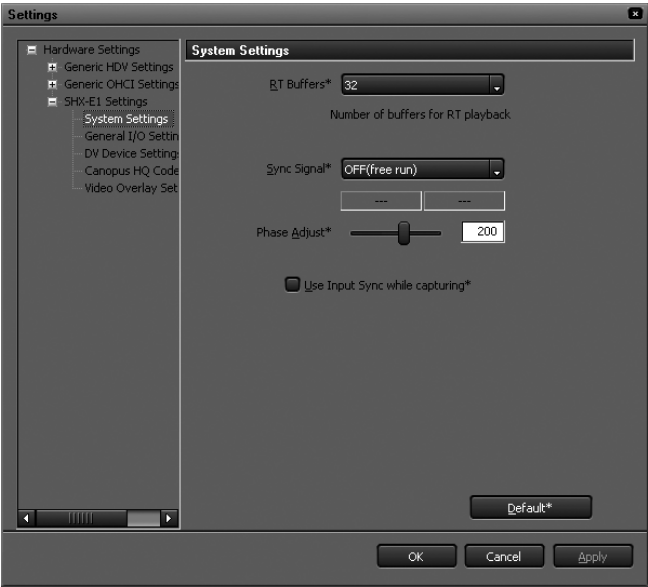
### Generic OHCI Input

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# Hardware Settings (SHX-E1 Settings)

Select the Hardware Settings from [Settings] menu.  
The [Settings] dialog box appears.

## System Settings



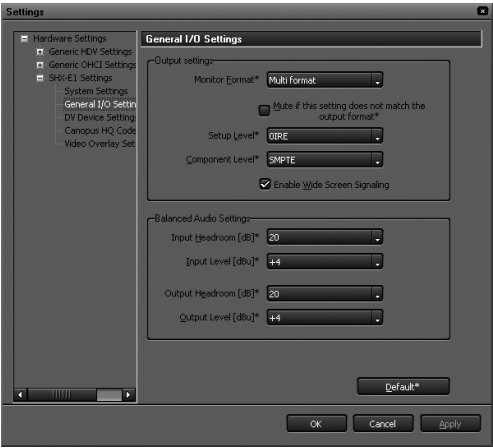
RT buffers	Set number of frames of buffers used in real time playback from 32, 48, 64 and 96. The larger the number is, the easier real time playback is, but it will require more system memory space.
Sync Signal	<p>You can select the reference input method from [Ref Sync], [Input Sync], [OFF (Free Run)].</p> <p>If the selected method does not supply the correct sync, it will automatically be adjusted to a suitable method.</p> <p>For example, during playback, if there is no input sync signal, the setting will be OFF. At capture, in will be set to Input Sync.</p> <p>The sync state is displayed below. [NO SYNC/SYNC OK] shows whether current system operates simultaneously with input signal or not. [NO SIGNAL/SIGNAL OK] means whether something is input in input terminal or not.</p>

**POINT** When there is no synchronous signal input at setting [Input sync], the system automatically operates in [OFF (free run)]. (The setting remains in [Input sync].) Even if synchronous signal is input after that, the operation keeps in [OFF (free run)]. In this case, click Player and Recorder in EDIUS preview window to switch over the active monitor. The system recognizes the synchronous signal and the operation returns to [Input sync].

Phase Adjust	Adjusts sync mode phase.
Use Input Sync while capturing	Check when you use Input Sync while capturing.
Default	Return the items with * to the default setting values.

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# General I/O Settings



## Output Settings

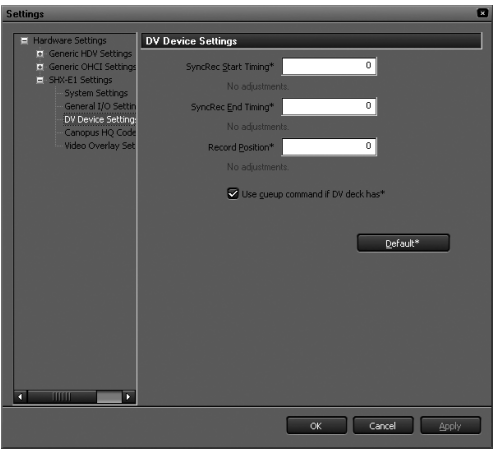
Monitor Format	Setup for monitor. Select [MultiFormat] for the monitor that can automatically recognize the switch of SD and HD. Select the connecting terminal, [HD] or [SD], for the monitor with SD and HD terminals separately.
Mute if this setting does not match the output format.	Check when you do not output signal when above setting is different from video format setting of timeline.
Setup Level	Select setup level (black) in NTSC. Select 7.5IRE for North America.
Component Level	Select component level in NTSC.
Enable Wide Screen Signaling	If TV complies with Wide Screen Signal (WSS: signal to switch aspect ratio), aspect ratio automatically switches (4:3 or 16:9). When WSS is not necessary, remove the check.



# Balanced Audio Settings

Input Headroom [dB]	Sets headroom from standard input level.
Input Level [dBu]	Select standard input level.
Output Headroom [dB]	Set headroom from standard output level.
Output Level [dBu]	Select standard output level.
Default	Return the items with * to the default setting values.

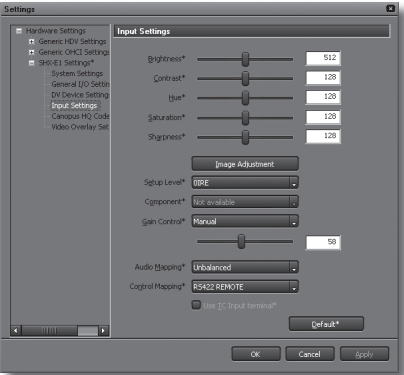
# DV Device Settings



SyncRec Start Timing	Set the timing adjustment at the beginning of computer playback by the number of frames.
SyncRec End Timing	Set the timing adjustment when stopping recording on VCR by the number of frames.
Record Position	Set position adjustment when starting to record by the number of steps.
Use cueup command if DV deck has	To use Cueup function of deck for quick deck operation, check this option.
Default	Return the items with * to the default setting values.

# Input Settings

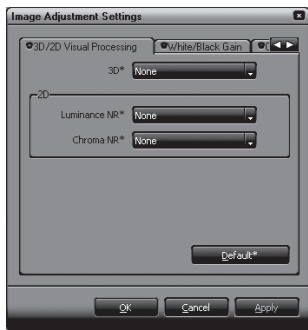
\* When [SHX-E1-Composite], [SHX-E1-S] or [SHX-E1-Component] has been selected by the [capture] menu, it is displayed.



Brightness	Adjust brightness of image. The smaller the value is, the darker the image is. The larger, the brighter.
Contrast	Adjust contrast of image. The smaller the value is, the weaker the contrast is. The larger, the stronger.
Hue	Adjust hue of image. The smaller the value is, the closer to dark red. The larger, the closer to dark green.
Saturation	Adjust color strength. The smaller the value is, the lighter the color is. The larger, the darker. You can reproduce complete gray-scale with minimum value 0 (zero).
Sharpness	Adjust sharpness of image outline. The smaller the value is, the more blur image outline is. The larger, the sharper.
Image Adjustment button	The [Image Adjustment] dialog box is displayed.
Setup Level	Select setup level (black). 7.5IRE for North America.
Component	Select component level.

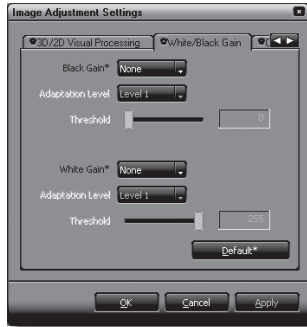
<b>Gain Control</b>	Adjust image brightness. When setting to Manual, luminance is manually set. When setting to Auto, luminance is automatically adjusted to optimum level.
<b>Audio Mapping</b>	Select balanced or unbalanced audio.
<b>Control Mapping</b>	Select whether RS422 remote control is active or not.
<b>Default</b>	Return the items with * to the default setting values.

## Image Adjustment Settings dialog



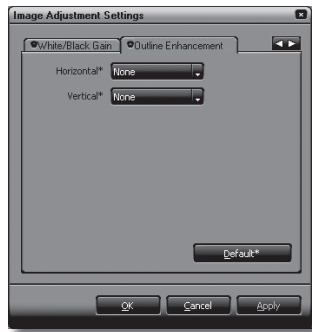
### [3D/2D Visual Processing] tab

<b>3D</b>	Set the effects for 3D noise reduction and 3D video processing (only in composite input).
<b>2D</b>	Eliminates the noise by non-linear noise extract filter. Available to set separately from 3D processing.
<b>Luminance NR</b>	Set the effect for noise reduction of luminance component (Y).
<b>Chroma NR</b>	Set the effect for noise reduction of chroma component (C).
<b>Default</b>	Sets the effect to the default setting.



[White/Black Gain] tab

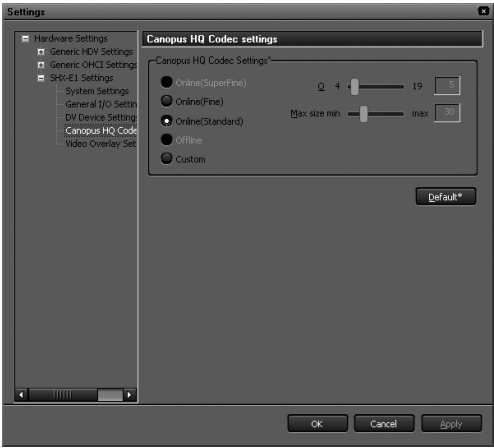
<b>Black Gain</b>	Strengthen the gain in low luminance area toward luminance signal. As the setting becomes stronger, black gain becomes more emphasized. When setting to [None], items for [Adaptation Level] and [Threshold] will be invalid.
<b>Adaptation Level</b>	Set the adjustment volume for black expansion. As the adjustment volume is larger, black gain becomes more emphasized.
<b>Threshold</b>	Set to which level of luminance (brightness) black will be emphasized. The level will be set brighter as you move the cursor to right.
<b>White Gain</b>	Strengthen the gain in high luminance area toward luminance signal. This option improves the gradation reproducibility for damaged area seen as white due to high luminance. When setting to [None], items for [Adaptation Level] and [Threshold] will be invalid.
<b>Adaptation Level</b>	Set the adjustment volume for white gain limit. As the limit volume is larger, white gain will be adjusted to lower.
<b>Threshold</b>	Set to which level of luminance (brightness) white gain will be adjusted lower. The level will be set darker as you move the cursor to left.
<b>Default</b>	Sets the effect to the default setting.



[Outline Enhancement] tab

<b>Horizontal</b>	Set the outline adjustment for horizontal direction (edge of horizontal line).
<b>Vertical</b>	Set the outline adjustment for vertical direction (edge of vertical line).
<b>Default</b>	Sets the effect to the default setting.

# Canopus HQ Codec Settings

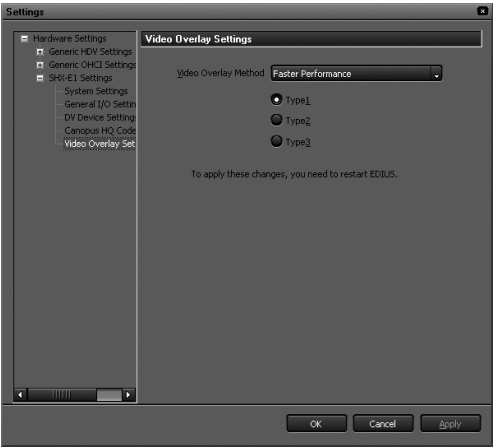


## Canopus HQ Codec Settings

Online (SuperFine)	You cannot select this setting.
Online (Fine)	Highest image quality setting, but larger file size is required. Select when you need to import the image with high quality.
Online (Standard)	You can normally import the image with standard quality in this setting.
Offline	You cannot select this setting.
Custom	Check this option to adjust [Q] and [Max size].
Q	Adjust image quality. Set between 4 and 19. The smaller the number is, the higher the quality is.
Max size	Adjust the maximum bitrate. You can control the file size when it sometimes becomes much bigger than usual due to too much noise included in the image. The setting value [100]% shows the same bitrate as the one before codec compression. For example, 100% of 1440 X 1080 60i is approx. 750Mbps. If you want to set the upper limit to 200Mbps, adjust the setting value to [27]% .
Default	Return the items with * to the default setting values.

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# Video Overlay Settings



Video Overlay Method	Change the overlay display method when the overlay is not displayed correctly.
Faster Performance	Select [Faster Performance] for smoother editing performance. The overlay preview may show some tearing. If it is not correctly displayed in [Type3], try [Type2], [Type1] in order. Select [Type3] to display in the highest speed.
No Tearing/Combing	Select [No Tearing/Combing] to display the interlace image in progressive scan. The overlay will show every field. Use this mode for checking fine motion.
No Tearing	Select [No Tearing] for faster performance than [No Tearing/Combing].



<b>Reduce PC bus load</b>	<p>If you select [No Tearing] or [No Tearing/Combing], the [Reduce PC bus load] checkbox is displayed. When bus busy occurs, you may check [Reduce PC bus load] to improve it, though CPU loading increases.</p> <p>* This function uses the graphic accelerator driver to avoid tearing.</p> <p>* When you select [No Tearing/Combing], the image may not be smoothly displayed depending on the refresh rate of your PC monitor. We recommend to set the PC monitor refresh rate close to integer multiple of the video frame rate.</p>
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# Chapter 3

## **Premiere Pro Capture/VideoOut Plug-in**

# 1

## Before use

When you use the plug-in function in Premiere Pro, be sure to confirm the following limitations.

### Playback Limitations

When opening a project, it may take a while for the output to show.

5.1 channel audio playback is not supported.

#### Limitations for HQ files

---

Time code remapping is not supported.

The project manager cannot trim HQ files.

Timeline consolidation is not supported.

#### Export Limitations

---

The pixel aspect setting is not correct when outputting 1440x1080 HD.

Do not open the setting dialog when outputting to a HD file (If you open the dialog, click cancel to abort).

5.1 channel audio file output is not supported.

Please close the capture window when writing back to tape.

#### Capture Limitations

---

Other manufacture's device controller modules and record modules may not work correctly with our hardware.

Starting capture without an input stream is not supported.

Please select the recording device option before going to the device controller settings.

#### Realtime Playback Limitations

---

Realtime playback performance will depend on your system spec.

# 2

## Editing in Adobe Premiere Pro

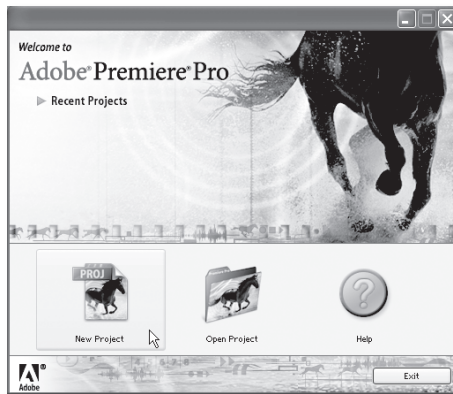
This section assumes you have working knowledge of Adobe Premiere Pro and its interface. If you are unfamiliar with Premiere Pro, we suggest you go through the Premiere Pro tutorial before attempting to use Canopus plug-ins within Premiere Pro. All the graphics in this chapter are based on Adobe Premiere Pro.

**Notes** You are not able to use EDIUS or video out plug-ins while you are operating with Premiere Pro plug-ins.  
It is of extreme importance that no other programs are running while editing in Premiere Pro.

### Creating New Projects

#### Starting the application

- 1 Click on the New Project icon to start Premiere Pro. Refer to the manual attached to the Premiere Pro for detailed instructions.



## POINT

Please make sure the Scratch disks setting (Edit/Preferences/Scratch Disks...) in Premiere Pro, to specify a physically individual hard disk drive from the system drive for each setting. Canopus recommends that you should prepare 4 partitions in 2 hard disk drives at least, the first one for OS, the second one for the 'Captured Video/Captured Audio', the third one for the 'Video Preview/Audio Preview', and the last one for the 'Conformed Audio'.

For example:

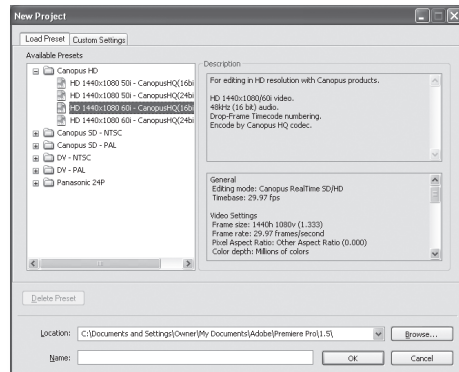
Disk1: Windows/Premiere Pro installed.

Disk2/Partition 1: Captured Video/Captured Audio

Disk2/Partition 2: Video Preview/Audio Preview

Disk2/Partition 3: Conformed Audio

## 2 Click [OK] after selecting parameters, such as video formats and aspect ratio, and entering a project name.



Choose one of the followings for configuration of a project according to the video format you specified during installation.

[Canopus HD]:

- HD 1440x1080 50i - Canopus HQ (16bitAudio)  
- Canopus HQ (24bitAudio)
- HD 1440x1080 60i - Canopus HQ (16bitAudio)  
- Canopus HQ (24bitAudio)

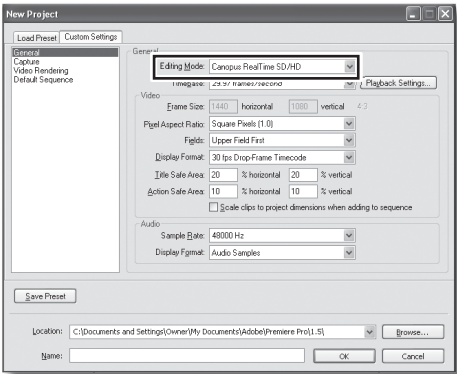
[Canopus SD - NTSC]:

- DV NTSC Standard - Canopus HQ
- DV NTSC Standard - MSDV
- DV NTSC Widescreen - Canopus HQ
- DV NTSC Widescreen - MSDV

[Canopus SD - PAL]:

- DV PAL Standard - Canopus HQ
- DV PAL Standard - MSDV
- DV PAL Widescreen - Canopus HQ
- DV PAL Widescreen - MSDV

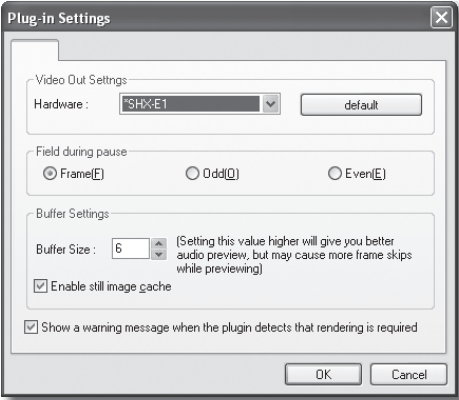
**3** Click the [Custom Settings] tab. Confirm that [Canopus RealTime SD/HD] is selected in [Editing Mode].



**Notes** When HD is selected, you cannot use the [Custom Settings] tab settings.

**4** Click [Playback Settings].  
When HD/SD is selected, the [Plug-in Settings] dialog is displayed.

5 Check required options and click [OK].

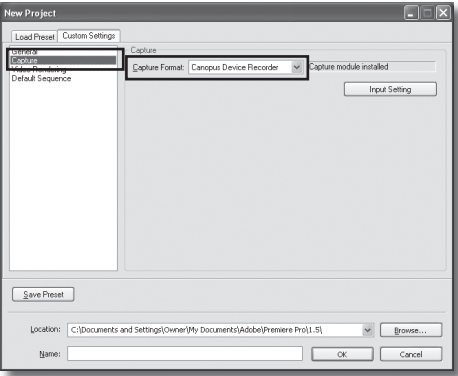


Field during pause	Set the exporting field when exporting the video as still image.
Buffer Size	<p>When the playback stops because it does not keep up with the speed just after starting the playback, it might help improving the situation to increase the number of frame.</p> <p>* The smallest value is 6, and the largest is 20. Generally you do not need to change the value.</p>
Show a warning message when the plug-in detects that rendering is required	<p>When rendering is required, the dialog is displayed.</p> <p>* When the dialog is not displayed, the real-time playback should not be guaranteed. This is the dialog to warn you when the clips required for rendering on the timeline increase.</p>

**Notes** For more information about Hardware Settings, see "Config dialog" P87.

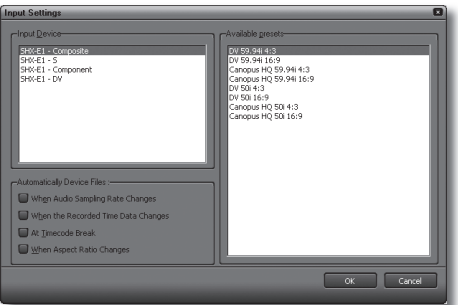


- 6 Select [Capture] from the left box, and make sure that [CanopusDevice Recorder] is selected in [Capture Format].



- 7 Click [Input Setting].  
The [Input Setting] dialog appears.

- 8 Set the items and click [OK].



### Available presets

Select preset. You can select from aspect ratio or audio bit rate.

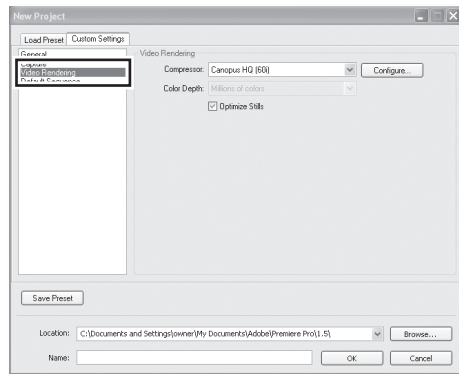
### Automatically Device Files

Select conditions in which the AVI files are automatically divided by each scene during capture operation. Conditions for the scene division are as follows:

- Change of audio sampling rate
- Change of record time data
- When the timecode breaks
- Change of aspect ratio

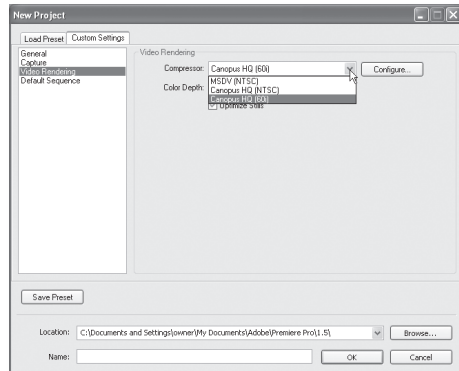
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## 9 Select [Video Rendering] from the left box.

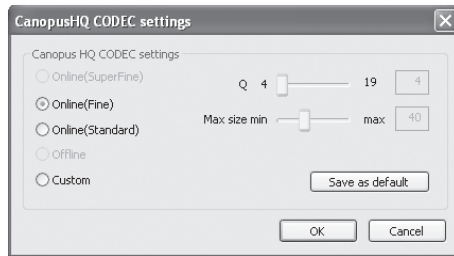


Select [Compressor].

- When NTSC SD is selected: [Canopus HQ(NTSC)], or [MSDV(NTSC)]
- When PAL SD is selected: [Canopus HQ(PAL)], or [MSDV(PAL)]



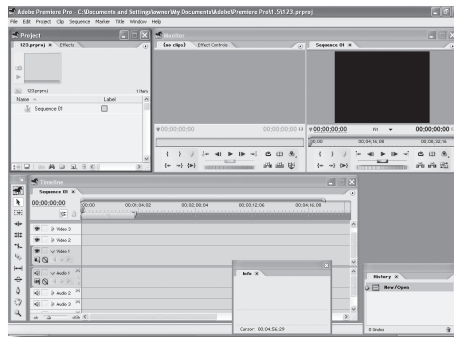
- 10 Click [Configure]. The [Canopus HQ CODEC settings] dialog opens. Set the settings and click [OK].



**Notes** For more information about Canopus HQ codec, see "Canopus HQ Codec Settings" P97.

**Notes** When HD is selected, you cannot use the [Custom Settings] tab settings.  
When you set the [Canopus HQ CODEC] settings in HD, create a project first. Then go to [Project Settings] from the [Project] menu, and select [Settings] in [Video rendering] to set the [Canopus HQ CODEC] settings.

- 11 Input the project name and click [OK].  
Main window of PremierePro is displayed.



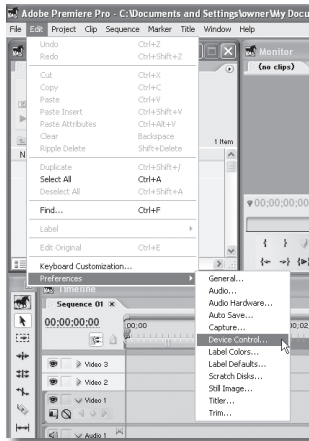
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# Setting Device Control

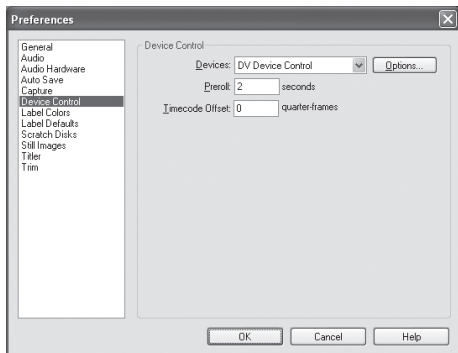
In order to use the DV device control in Batch Capture and Movie Capture, you need to make sure Premiere Pro is using the appropriate device control module.

## Opening the EDIUS SP Properties dialog

- 1 From Edit menu, select Preferences > Device Control.  
The Preferences dialog opens.



- 2 Make sure that Canopus DV Device Control is selected as Devices, then click [Options].



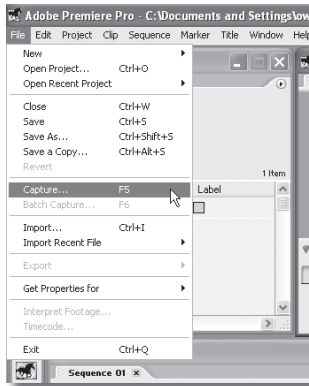
**Notes** For more information about Hardware Settings, see "Config dialog" P87.

- 3 To enable the settings, click [OK].
- 4 Specify the settings by following the sections below.

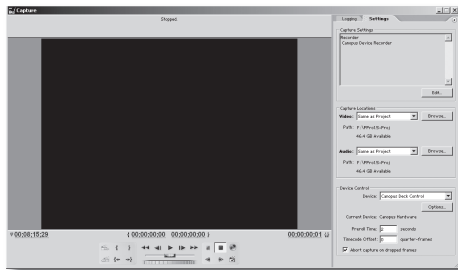
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# Capture

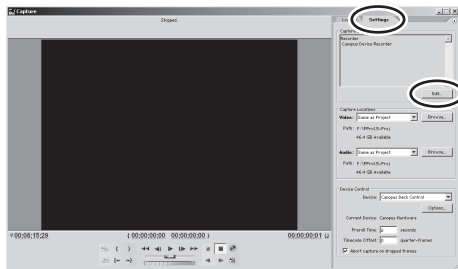
- 1 Select [Capture] from [File] menu.



The [Capture] window opens.

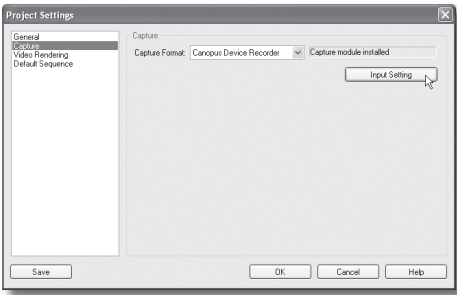


- 2 Click [Edit] in [Settings] tab to specify the input destination.

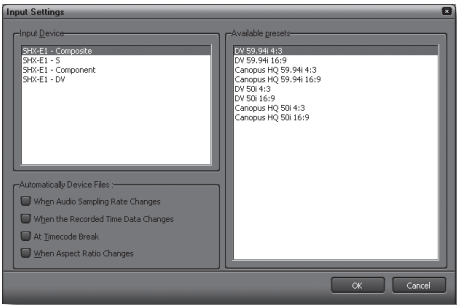


The [Project Settings] dialog box appears.

### 3 Select [Capture] from the left menu and click [Input Settings].

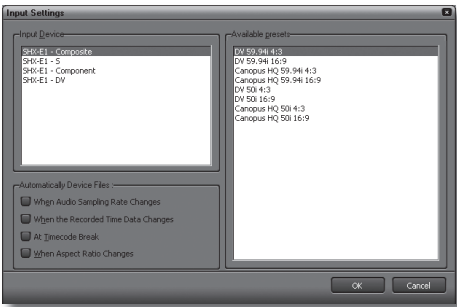


The [Input Settings] dialog box appears.



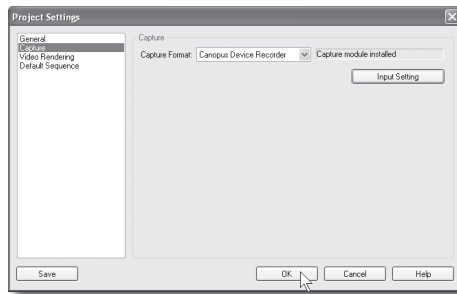
\* The displayed contents differ depending on your environment.

### 4 Select the device input destination and presets, and click [OK].



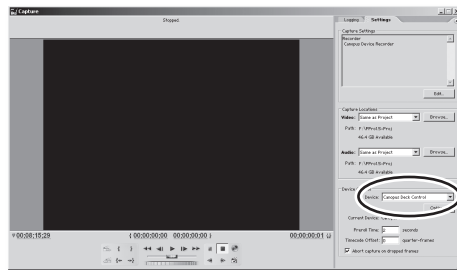
The dialog box closes.

## 5 Click [OK].



The dialog box closes.

## 6 Confirm that the device name for device control is shown as [Canopus Deck Control]. If a different device name is shown, select [Canopus Deck Control] from the drop down list.

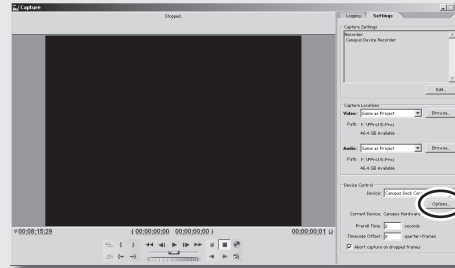




## Notes

### Optional settings

For the deck settings, click [Options]. The [Settings] dialog appears.

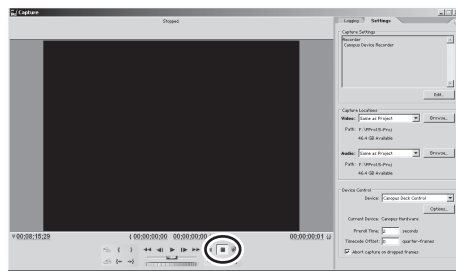


After setting, click the [OK] button to close the [Settings] dialog. For more information about Hardware Settings, see "Config dialog" P87.

## 7 Click [Record]. Start capturing.



## 8 Click [Stop] and finish capturing.



# When executing batch capture

\* For analog devices, use RS-422 control.

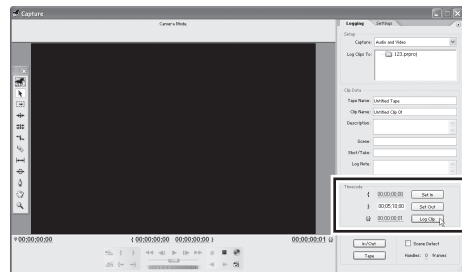
**1** Follow the step 1 to 4 in "Capture".

**Notes** For more information about Capture, see "Capture" P78.

**2** Select the [Logging] tab in the [Capture] dialog.

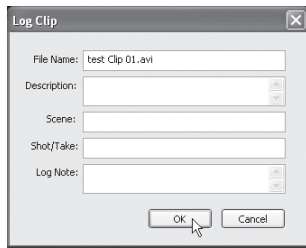


**3** Set the timecode (In/Out) and click [Log clip].

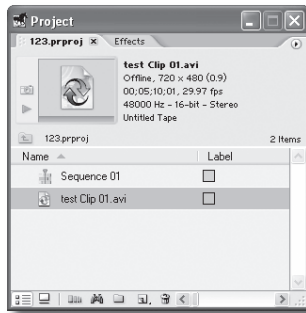


The [Log clip] dialog appears.

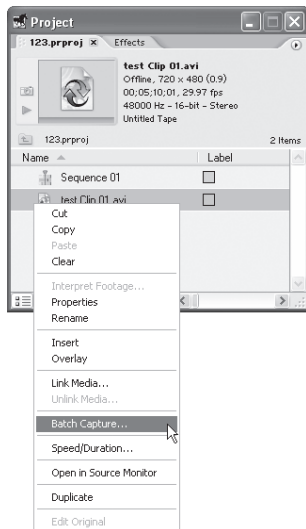
#### 4 Type in a file name and description, and click [OK].



The list appears in the project.

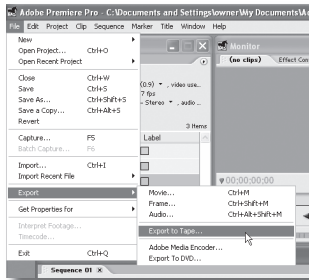


#### 5 Select [Batch Capture] from the right-click menu of the list.



## Exporting to tapes

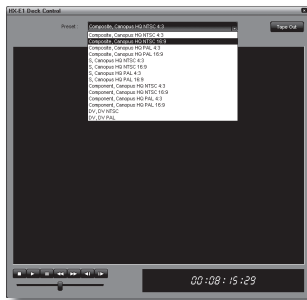
- 1 Go to [Export] from the [File] menu, and select [Export to Tape].



The [HX-E1 Deck Control] dialog opens.



## 2 Select the presets.

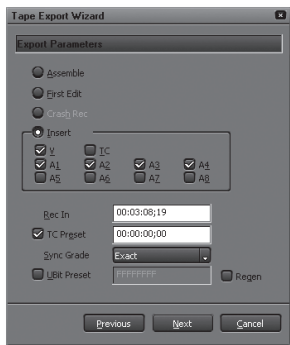


- 3 Click [Tape Out].  
Start exporting.



## Tape Export Wizard

When 9-pin control is used (for analog device), the [Tape export Wizard] dialog appears before exporting. After setting, click the [Next] button.



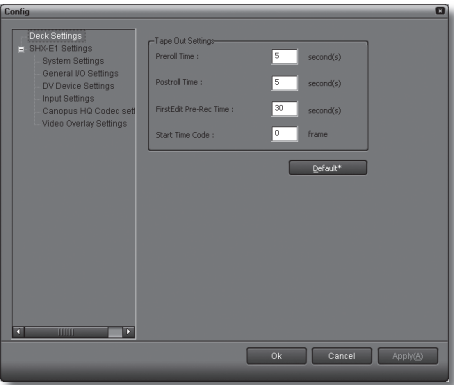
Assemble	Adds following the tape (with timecode).
First Edit	Exports to the tape (without timecode or newly overwrite).
Insert	Inserts in the tape.
Rec In	Sets the importing position of the tape.

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<b>TC Preset</b>	Sets the timecode imported in the tape when [Assemble] or [Insert] is selected and TC is check marked.
<b>Sync Grade</b>	Sets the allowed value for a frame gap imported in the tape when [Assemble] or [Insert] is selected. Exact: Cannot accept the allowed value. Exporting is not available if the frame gap occurs. Rough: Accepts the allowed value for a frame gap by +/-1.
<b>UBit Preset</b>	Adds the user's bit
<b>Regen</b>	Sets the user's bit obtained in the tape Rec In point as the start point for exporting (preset value).

# Config dialog

## Deck Settings

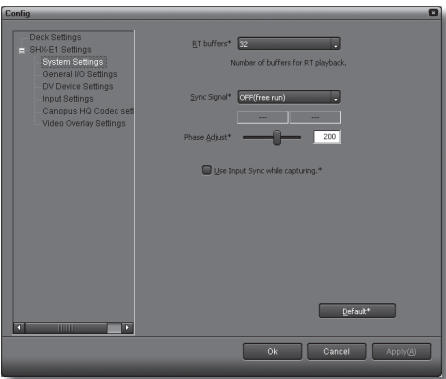


## Tape Out Settings

Preroll Time	Set the preliminary operation time (Preroll) before capture.
Postroll Time	Set the post operation time (Postroll) after capture.
FirstEdit Pre-Rec Time	Set the draft (margin) length at FirstEdit.
Start Time Code	Type in the start timecode of your project.
Default	Return the items with * to the default setting values.

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# System Settings



RT buffers	Set number of frames of buffers used in real time playback among 32, 48, 64, and 96. The larger the number is, the easier real time playback is, but with larger memory consumption.
Sync Signal	<p>You can select the reference input method from [Ref Sync], [Input Sync], [OFF (Free Run)].</p> <p>If the selected method does not supply the correct sync, it will automatically be adjusted to a suitable method.</p> <p>For example, during playback, if there is no input sync signal, the setting will be OFF. At capture, in will be set to Input Sync.</p> <p>The sync state is displayed below. [NO SYNC/ SYNC OK] shows whether current system operates simultaneously with input signal or not. [NO SIGNAL/SIGNAL OK] means whether something is input in input terminal or not.</p>

**POINT** When there is no synchronous signal input at setting [Input sync], the system automatically operates in [OFF (free run)]. (The setting remains in [Input sync].) Even if synchronous signal is input after that, the operation keeps in [OFF (free run)]. In this case, click Player and Recorder in EDIUS preview window to switch over the active monitor. The system recognizes the synchronous signal and the operation returns to [Input sync].



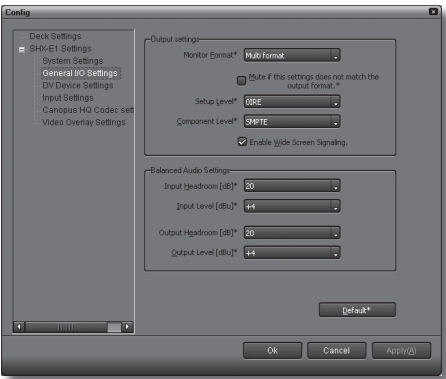
Phase Adjust	Adjusts sync mode phase.
Use Input Sync while capturing	Check when you use Input Sync while capturing.
Default	Return the items with * to the default setting values.

**POINT** The buffer counter can be enabled in the Playback Settings dialog (see Playback Settings at the previous section). The playback buffer allows the system to play back in real-time through short areas that have more effects than could normally be handled. As the duration of the "overloaded" area increases, the playback buffer gets depleted. When this counter runs out, the system is no longer able to process in real-time and frames get dropped (or playback stops). The playback buffer gets replenished as the system goes through areas that have enough CPU power to process. You can also start playback with the playback buffer pre-filled by holding down the Shift key and clicking the Play button on the target side of the Monitor window.



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# General I/O Settings



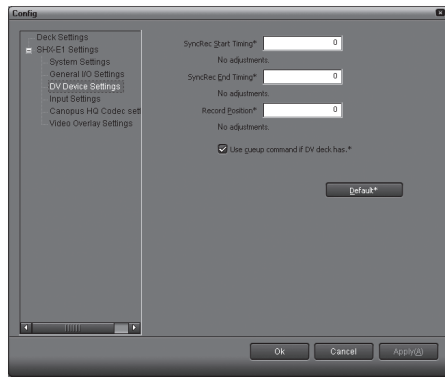
## Output settings

Monitor Format	Setup for monitor. For monitor automatically recognizing that SD/HD is switched to the other, select [Multi format]; and for monitor with SD or HD terminal separately, select either [SD] or [HD].
Mute if this settings does not match with output format.	Check when you do not output signal when above setting and video format setting of timeline is different.
Setup Level	Select setup level (black) in NTSC. 7.5 IRE for North America.
Component Level	Select component level in NTSC.
Enable Wide Screen Signaling.	If TV complies with Wide Screen Signal (WSS: signal to switch aspect ratio), aspect ratio automatically switches (4:3 or 16:9). When WSS is not necessary, remove the check.
Default	Return the items with * to the default setting values.

# Balanced Audio Settings

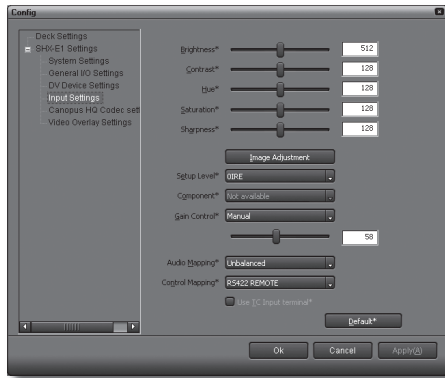
Input Headroom [dB]	Sets headroom from standard input level.
Input Level [dBu]	Select standard input level.
Output Headroom [dB]	Set headroom from standard output level.
Output Level [dBu]	Select standard output level.
Default	Return the items with * to the default setting values.

## DV Device Settings



<b>SyncRec Start Timing</b>	Adjust the timing of starting playback on PC by the number of frames.
<b>SyncRec End Timing</b>	Set the timing adjustment when stopping recording on the VCR by the number of frames.
<b>Record Position</b>	Set position adjustment when starting to record by the number of steps.
<b>Use cueup command if DV deck has.</b>	To use Cueup function of deck, check this box.
<b>Default</b>	Return the items with * to the default setting values.

# Input Settings

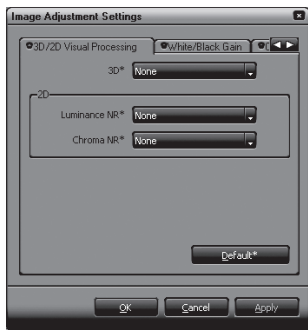


<b>Brightness</b>	Adjust brightness of image. The smaller the value is, the darker the image is. The larger, the brighter.
<b>Contrast</b>	Adjust contrast of image. The smaller the value is, the weaker the contrast is. The larger, the stronger.
<b>Hue</b>	Adjust hue of image. The smaller the value is, the closer to dark red. The larger, the closer to dark green.
<b>Saturation</b>	Adjust color strength. The smaller the value is, the lighter the color is. The larger, the darker. You can reproduce complete gray-scale with minimum value 0 (zero).
<b>Sharpness</b>	Adjust sharpness of image outline. The smaller the value is, the more blur image outline is. The larger, the sharper.
<b>Image Adjustment button</b>	The [Image Adjustment] dialog box is displayed.
<b>Setup Level</b>	Select setup level (black). 7.5IRE for North America.
<b>Component</b>	Select component level.

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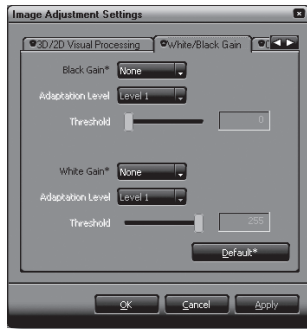
<b>Gain Control</b>	Adjust image brightness. When setting to Manual, luminance is manually set. When setting to Auto, luminance is automatically adjusted to optimum level.
<b>Audio Mapping</b>	Select balanced or unbalanced audio.
<b>Control Mapping</b>	Select whether RS422 remote control is active or not.
<b>Default</b>	Return the items with * to the default setting values.

## Image Adjustment Settings dialog



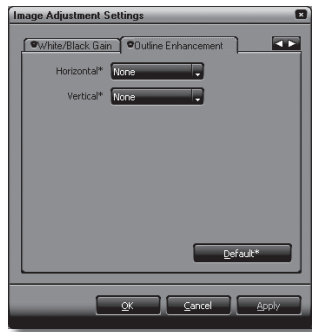
### [3D/2D Visual Processing] tab

<b>3D</b>	Set the effects for 3D noise reduction and 3D video processing (only in composite input).
<b>2D</b>	Eliminates the noise by non-linear noise extract filter. Available to set separately from 3D processing.
<b>Luminance NR</b>	Set the effect for noise reduction of luminance component (Y).
<b>Chroma NR</b>	Set the effect for noise reduction of chroma component (C).
<b>Default</b>	Sets the effect to the default setting.



[White/Black Gain] tab

<b>Black Gain</b>	Strengthen the gain in low luminance area toward luminance signal. As the setting becomes stronger, black gain becomes more emphasized. When setting to [None], items for [Adaptation Level] and [Threshold] will be invalid.
<b>Adaptation Level</b>	Set the adjustment volume for black expansion. As the adjustment volume is larger, black gain becomes more emphasized.
<b>Threshold</b>	Set to which level of luminance (brightness) black will be emphasized. The level will be set brighter as you move the cursor to right.
<b>White Gain</b>	Strengthen the gain in high luminance area toward luminance signal. This option improves the gradation reproducibility for damaged area seen as white due to high luminance. When setting to [None], items for [Adaptation Level] and [Threshold] will be invalid.
<b>Adaptation Level</b>	Set the adjustment volume for white gain limit. As the limit volume is larger, white gain will be adjusted to lower.
<b>Threshold</b>	Set to which level of luminance (brightness) white gain will be adjusted lower. The level will be set darker as you move the cursor to left.
<b>Default</b>	Sets the effect to the default setting.

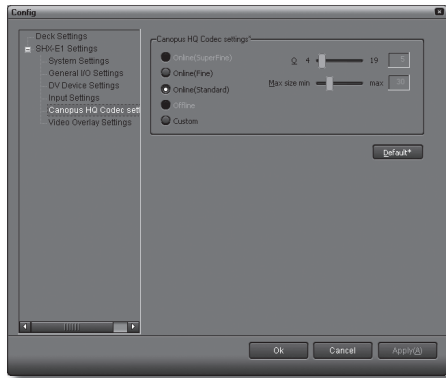


[Outline Enhancement] tab

<b>Horizontal</b>	Set the outline adjustment for horizontal direction (edge of horizontal line).
<b>Vertical</b>	Set the outline adjustment for vertical direction (edge of vertical line).
<b>Default</b>	Sets the effect to the default setting.



# Canopus HQ Codec Settings

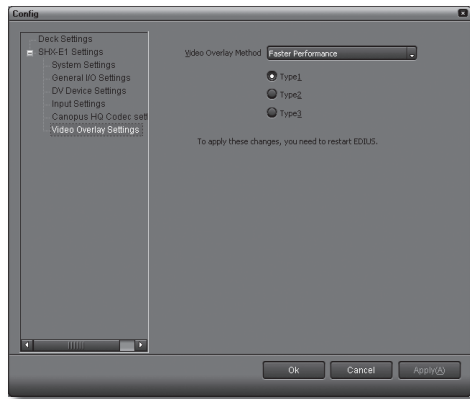


## Canopus HQ Codec settings

Online (SuperFine)	Not available.
Online (Fine)	Highest image quality but with larger file size. Select this when high image quality scanning is needed.
Online (Standard)	Normally you can obtain the sufficient quality in this setting.
Offline	Not available.
Custom	Can adjust [Q] and [Max size] with check mark.
Q	Adjust image quality. Set between 4 and 30. The smaller the number is, the higher the quality is.
Max size	Adjust largest bit rate. You can set to limit file size that enlarges improvidently if there is too much noise on image. [100]% means the same size as uncompressed image. For example, 100% of 1440 X 1080 60i is approx. 750Mbps. If you want to set upper limit for 200Mbps, set max size for [27]% .
Default	Return the items with * to the default setting values.

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# Video Overlay Settings



<b>Video Overlay Method</b>	Change the overlay display method when the overlay is not displayed correctly.
<b>Faster Performance</b>	Select [Faster Performance] for smoother editing performance. The overlay preview may show some tearing. If it is not correctly displayed in [Type3], try [Type2], [Type1] in order. Select [Type3] to display in the highest speed.
<b>No Tearing/Combing</b>	Select [No Tearing/Combing] to display the interlace image in progressive scan. The overlay will show every field. Use this mode for checking fine motion.
<b>No Tearing</b>	Select [No Tearing] for faster performance than [No Tearing/Combing].

Reduce PC  
bus load

If you select [No Tearing] or [No Tearing/Combing], the [Reduce PC bus load] checkbox is displayed. When bus busy occurs, you may check [Reduce PC bus load] to improve it, though CPU loading increases.

- \* This function uses the graphic accelerator driver to avoid tearing.
- \* When you select [No Tearing/Combing], the image may not be smoothly displayed depending on the refresh rate of your PC monitor. We recommend to set the PC monitor refresh rate close to integer multiple of the video frame rate.

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## Chapter 4

# **Video-Out Plug-in**

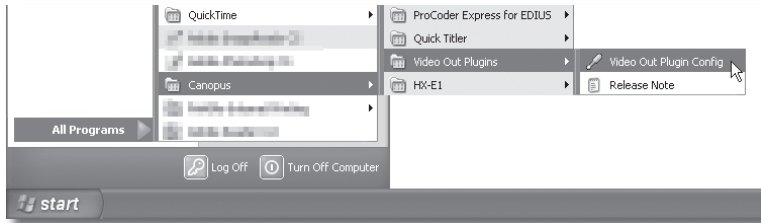
# 1

## Setting Video-Out plug-in

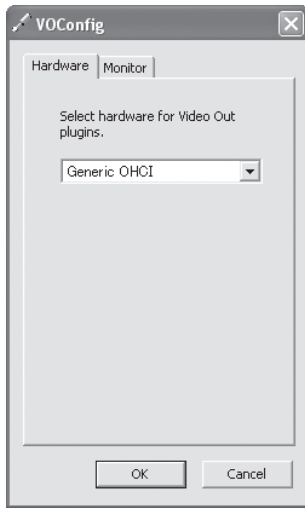
### Preparation before use

Perform following settings before using video out plug-in.

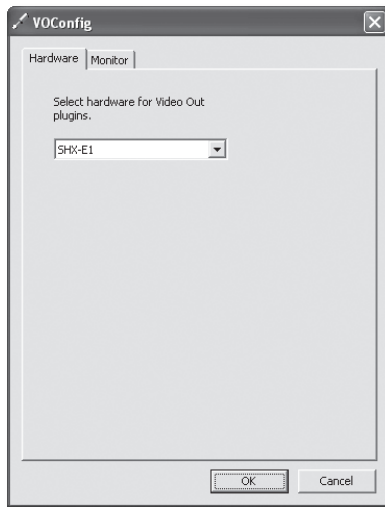
- 1 Select [All Programs] of [start] menu and go to [Canopus] / [Video Out Plugins] / [Video Out Plugin Config].



The [VOConfig] dialog box appears.



## 2 Select [SHX-E1] in the [Hardware] tab.

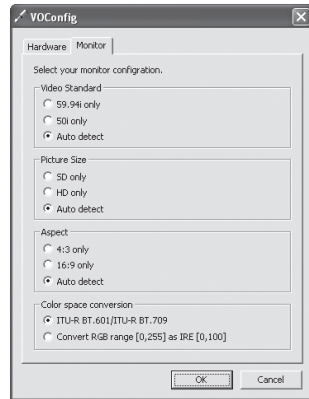


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### 3 Set the [Monitor] tab and click [OK].

Video output is performed in the most suitable format for output image size among formats the hardware can output. You can sort profiles of output format by selecting video standard, picture size and aspect settings.

Perform monitor setting to correspond with input format that your Video Monitor supports. For example, if yours supports only NTSC, select [59.94i only].



- POINT** Video-Out plug-in image output differs between SD and HD.
- For SD  
Output to component, S video or composite.
  - For HD  
Output to component.



# 2

## After Effects Video-Out Plug-in

### Using After Effects for Video-out plug-in

You can work while checking image displayed in After Effects composition window output from image output of main board or expansion board to video monitor. Click "File" on the menu bar, select "Settings".

#### Notes Limitations

- Changes made in settings are not reflected immediately. They are reflected when you click inside Composition window, scrub in the timeline window, or perform some other operation.
- If RAM preview playback is not smooth, use the dialog that opens when you click Edit / Environment settings / Cache to set Image cache size to a smaller value.
- Compression and cropping are not supported.
- RAM previews may not be carried out in realtime at maximum size.

## POINT

- Use the following composition preset setting corresponding to your video standard.

[HD]

Preset: HDTV, 1280 x 720

Pixel aspect ratio: Square pixel

Frame rate: 29.97 frames/sec

Preset: Custom\*

Width: 1920

Height: 1080

Pixel aspect ratio: Square pixel

Frame rate: 29.97 frames/sec

\* Select the preset according to your operating condition.

[SD]

Preset: NTSC D1, 720x486 or NTSC DV, 720x480

Pixel aspect ratio: D1/DV NTSC (0.9)

Frame rate: 29.97 frames/sec

Preset: PAL D1/DV, 720x576

Pixel aspect ratio: D1/DV PAL (1.07)

Frame rate: 25 frames/sec

- We recommend the following settings for render frame output module.

[HD]

Output module: Custom

Format: Video for Windows

Format option: Canopus HQ

Audio output: 48,000 kHz 16-bit stereo

[SD]

Output module: Custom

Format: Video For Windows

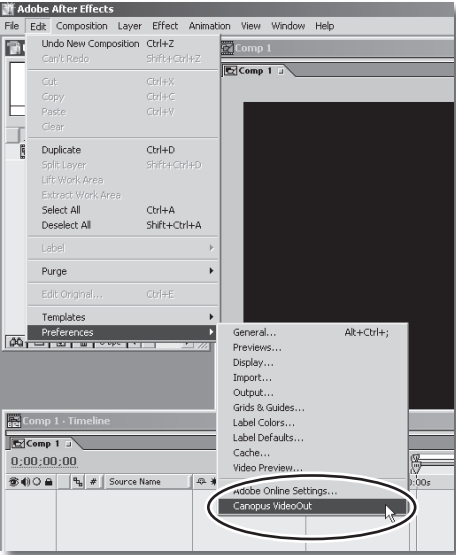
Format option: Canopus DV

Audio output: 48,000 kHz 16-bit stereo

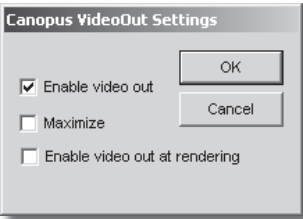
1 Start up After Effects and select [Edit] from menu.

\* Connect image output terminal of main board or expansion board to TV monitor in advance.

2 Select [Preferences] of [Edit] menu / [Canopus VideoOut].



3 Make the following settings in the [Canopus VideoOut Settings] dialog.



Enable video out	When this is checked, Composition window is output to monitor.
Maximize	When this is checked, Composition window is expanded to full scale.
Enable video out at rendering	Rendering image is output to monitor.

# 3

## Photoshop Video Out Plug-in

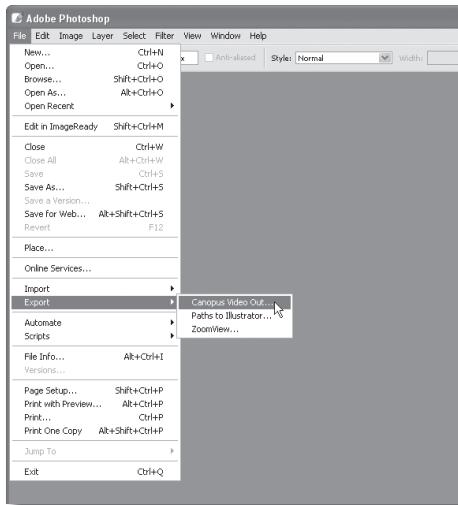
### Using Photoshop for Video Out Plug-in

You can output images shown in Photoshop to video monitor from image output of main board or expansion board (optional). This allows you to use images created in Photoshop as video material, and adjust images for optimum color balance for video.

**1** Start Photoshop, and open the file you want to output to video.

\* Connect image output terminal of main board or expansion board to TV monitor in advance.

**2** From the [File] menu, select [Export] / [Canopus Video Out].



A still image appears on video monitor.

#### Notes Command

You cannot execute [Export] command in action in Photoshop CS. If you use keyboard shortcut, you need to register that command from [Edit] / [Keyboard shortcut].

## Chapter 5

# **ADVC Mode Controller**

# 1

## ADVC Mode Controller functions

**Notes** ADVC Mode Controller is the application software available to use when expansion board is installed.

### ADVC mode

ADVC mode will use EDIUS SP as converter. EDIUS SP will not be recognized by EDIUS when in this mode.

### EDIUS mode

Use EDIUS SP from EDIUS. This is similar operation mode to that without ADVC Mode Controller.

### Non Node mode

When you cannot operate the DV camera connected to DV terminal of expansion board from application software OHCI mode, selecting this mode may solve the problem.

## Using ADVC mode

### 1 Start up ADVC Mode Controller.



ADVC Mode  
Controller

ADVC Mode Controller resides in task tray whenever you start.



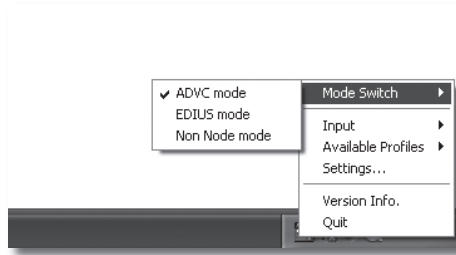
## POINT

The following dialog appears when starting up ADVC Mode Controller at the first time. Select the video standard according to your environment, and click [OK].



## 2 Click icon and select [ADVC mode] from [Mode Switch].

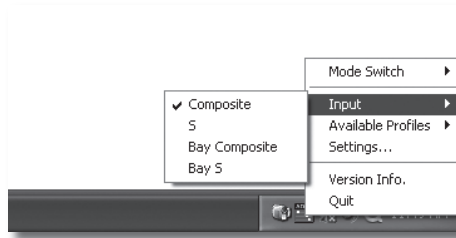
\* Do not switch the modes while edit application software is running.



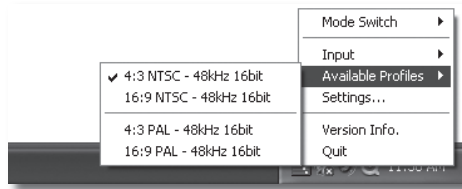
## POINT

For using in EDIUS mode, start up ADVC Mode Controller to select mode before starting up EDIUS.

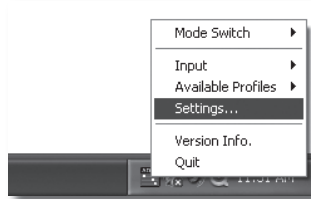
## 3 Select input destination.



#### 4 Select profiles.



#### 5 Open the setup dialog for settings.



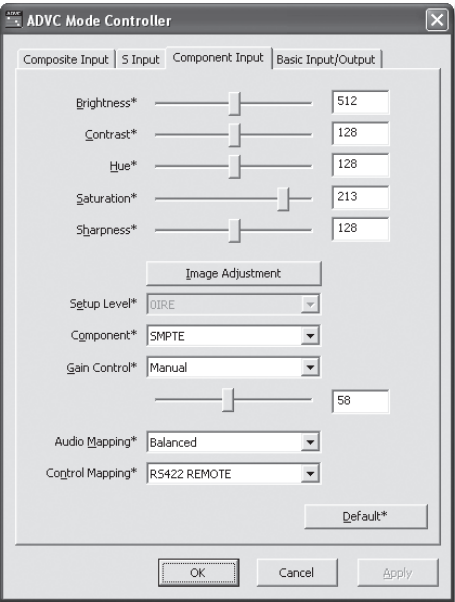
**POINT** ADVC Mode setting  
For set up, see "Setup dialog box" on P113.



# Setup dialog box

The settings below is valid in ADVC mode.

## Composite Input/S Input/Component Input

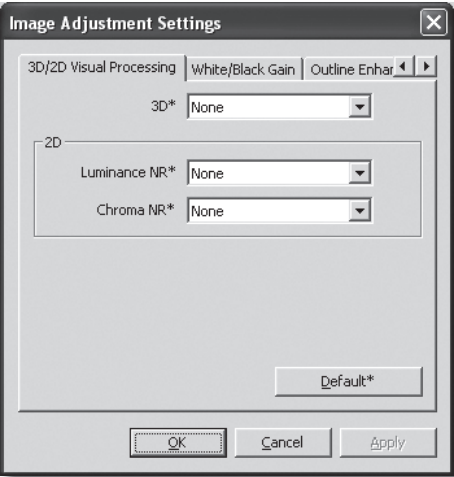


Brightness	Adjust brightness of image. The smaller the value is, the darker the image is; the larger, the brighter.
Contrast	Adjust contrast of image. The smaller the value is, the weaker the contrast is; the larger, the stronger.
Hue	Adjust hue of image. The smaller the value is, the closer to dark red; the larger, the closer to dark green.

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<b>Saturation</b>	Adjust color strength. The smaller the value is, the lighter the color is; the larger, the darker. You can reproduce complete gray-scale with minimum value 0 (zero).
<b>Sharpness</b>	Adjust sharpness of image outline. The smaller the value is, the more blur image outline is; the larger, the sharper.
<b>Image Adjustment button</b>	The [Image Adjustment] dialog box is displayed.
<b>Setup Level</b>	(0IRE / 7.5IRE) Select setup level (black) in NTSC. 7.5IRE for North America.
<b>Component</b>	Select component level.
<b>Gain Control</b>	(Manual / Auto) Adjust image brightness. When setting to Manual, luminance is manually set. When setting to Auto, luminance is automatically adjusted to optimum level.
<b>Audio Mapping</b>	Select balanced or unbalanced audio.
<b>Control Mapping</b>	Select whether RS422 remote control is active or not.
<b>Default</b>	Return the items with * to the default setting values.

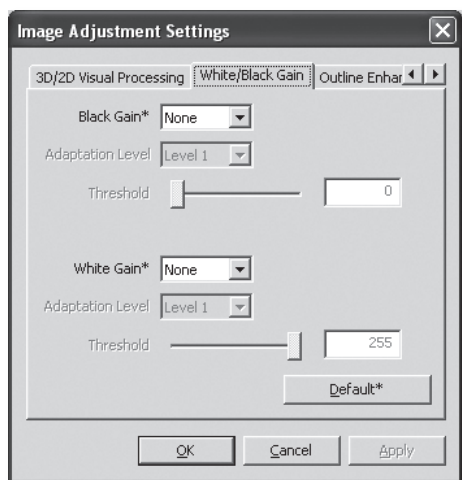
# Image Adjustment Settings dialog



[3D/2D Visual Processing] tab

3D	Set the effects for 3D noise reduction and 3D video processing (only in composite input).
2D	Eliminates the noise by non-linear noise extract filter. Available to set separately from 3D processing.
Luminance NR	Set the effect for noise reduction of luminance component (Y).
Chroma NR	Set the effect for noise reduction of chroma component (C).
Default	Sets the effect to the default setting.

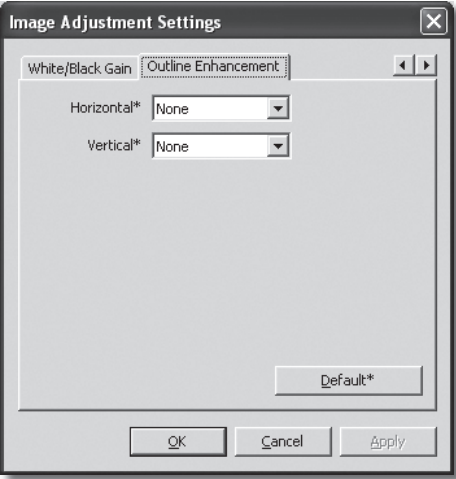
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[White/Black Gain] tab

<b>Black Gain</b>	Strengthen the gain in low luminance area toward luminance signal. As the setting becomes stronger, black gain becomes more emphasized. When setting to [None], items for [Adaptation Level] and [Threshold] will be invalid.
<b>Adaptation Level</b>	Set the adjustment volume for black expansion. As the adjustment volume is larger, black gain becomes more emphasized.
<b>Threshold</b>	Set to which level of luminance (brightness) black will be emphasized. The level will be set brighter as you move the cursor to right.
<b>White Gain</b>	Strengthen the gain in high luminance area toward luminance signal. This option improves the gradation reproducibility for damaged area seen as white due to high luminance. When setting to [None], items for [Adaptation Level] and [Threshold] will be invalid.
<b>Adaptation Level</b>	Set the adjustment volume for white gain limit. As the limit volume is larger, white gain will be adjusted to lower.

<b>Threshold</b>	Set to which level of luminance (brightness) white gain will be adjusted lower. The level will be set darker as you move the cursor to left.
<b>Default</b>	Sets the effect to the default setting.

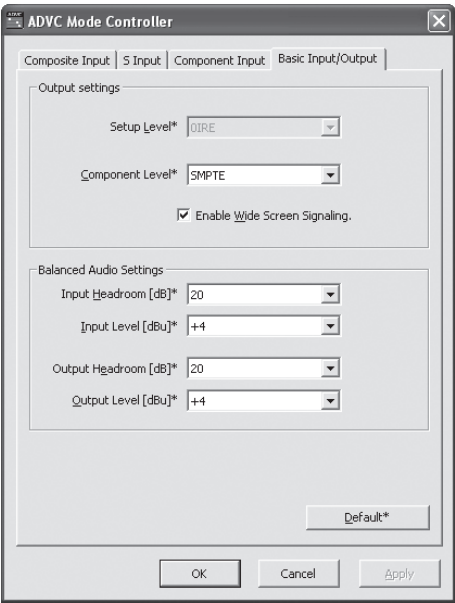


[Outline Enhancement] tab

<b>Horizontal</b>	Set the outline adjustment for horizontal direction (edge of horizontal line).
<b>Vertical</b>	Set the outline adjustment for vertical direction (edge of vertical line).
<b>Default</b>	Sets the effect to the default setting.

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# Basic Input/Output tab



## Output settings

Setup Level	Select setup level (black) in NTSC. 7.5IRE for North America.
Component Level	Select component level in NTSC.
Enable Wide Screen Signaling.	If TV complies with Wide Screen Signal (WSS: signal to switch aspect ratio), aspect ratio automatically switches (4:3 or 16:9). When WSS is not necessary, remove the check.

## Balanced Audio Settings

Input Headroom [dB]	Sets headroom from standard input level.
Input Level [dBu]	Select standard input level.
Output Headroom [dB]	Set headroom from standard output level.
Output Level [dBu]	Select standard output level.
Default	Return the items with * to the default setting values.

# APPENDIX

# 1

# Hardware Specifications

## Main board

### EDIUS SP (SHX-E1)

PCI standard	PCI Spec. Revision 2.1 For HD/SD edit: 64bit/66MHz PCI For SD edit: 32bit/33MHz PCI	
Digital video	DV terminal (DV 4pin) x 1 * OHCI board or Expansion board is required for HDV I/O.	
Analog video	Input *1	Composite (BNC) x 1 S-Video (Mini DIN 4pin) x 1 Component (BNC) x 3
	Output *1	Composite (BNC) x 1 S-Video (Mini DIN 4pin) x 1 Component (BNC) x 3
Analog audio	Input *1	Unbalanced audio 2ch (RCA) pin x 2 Balanced audio 2ch (XLR) x2
	Output *1	Unbalanced audio 2ch (RCA) pin x 2 Balanced audio 2ch (XLR) x2
Board size	212mm (Width 107mm)	
Max consumption current	32bit PCI (for SD edit) +5V: 2.2A, +12V: 440mA, -12V: 160mA 64bit PCI (for HD edit) +5V: 2.4A, +12V: 440mA, -12V: 160mA	
Weight	About 250g	

\*1 Connected from main board connector (D-Sub62 x 1) with special multi I/O cable.



## Expansion board (HX-HD1)

PCI standard	PCI Spec. Revision 2.1 (32bit /33MHz)	
Analog video	Output	HD/SD component output (BNC) x 3
Analog audio	Output	Unbalanced audio (RCA pin jack) x 2 * Can simultaneously be used with audio output of main board.
Board size	120mm (Width 93mm)	
Max consumption current	+5V: 200mA, +12V: 100mA, -12V : 100mA	
Weight	About 110g	

## Unbalanced output

Output Headroom[dB]	Output Level [dBu]	Unbalance output level [Vrms]
+4	20	2.0
	18	1.6
	16	1.26
0	20	1.26
	18	1.0
	16	0.8

\* When Unbalance input is selected, Unbalance input level is fixed to 2.0 [Vrms].

\* Unbalance output level varies depending on the output headroom or output level setting of balance audio.

# 2

## Codec

### Recommended codec

Recommended codec	Video Device
DVCPRO HD	DVCPRO HD(when using via IEEE1394)
DVCPRO50	DVCPRO 50
Canopus DV	DV AVI
Canopus HQ	HDCAM, HDV(1080i/720p), DVCPRO HD
Uncompressed D1	D1, Digital Betacam, Betacam, MPEG IMX(Uncompressed)
Canopus Lossless	D1, Digital Betacam, Betacam, MPEG IMX(Lossless compression)

### Canopus HQ

- Resolution: HD and SD
- Recommended input devices: HDCAM/HDV

This Codec adjusts the stream bitrate depending on the image, to sustain image quality. Simple images will be compressed to low bitrates, and more complex images will use higher bitrates. This Codec is designed to sustain the image quality of HDCAM(140Mbps) or HDV(25Mbps). A max bitrate is set to keep the bitrate within realtime capture capable range.

[Online(Standard)] and [Online(Fine)] settings are available for adjustments. It is set to Online(Standard) at default.

Maximum bitrate for each is as follows:

[Online (Standard)] Initial: 220 Mbps approx.

[Online (Fine)] Initial: 300 Mbps approx.

### DVCPRO HD

- Resolution: HD
- Recommended input devices: DVCPRO HD

This codec is compliant to the DVCPRO HD codec from Panasonic. Bitrate (100 Mbps) and other parameters are fixed.

### DVCPRO50

- Resolution: SD
- Recommended input devices: DVCPRO 50

This codec is compliant to the DVCPRO 50 codec from Panasonic. Bitrate (50 Mbps) and other parameters are fixed.

# Uncompressed D1

- Resolution: SD
  - Recommended input devices: D1, Betacam, Digital Betacam, and MPEG IMX
- No compression is applied to the video. The bitrate is approximately 168 Mbps and will require a fast hard drive (RAID is required) for realtime editing.

# Canopus Lossless

- Resolution: SD
  - Recommended input devices: D1, Betacam, Digital Betacam, and MPEG IMX
- A reversible compression is applied, to save disk space while capturing. Since this requires CPU power for encode/decode, realtime performance will drop when using these files. Bitrate is variable, and may reach 168 Mbps depending on the complexity of the image.

# Canopus DV

- Resolution: SD
  - Recommended input devices: DV/DVCAM
- This codec is compliant to Microsoft DV, but with higher quality and realtime performance. The bitrate is fixed at 25 Mbps.

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## Each codec and disk space required per an hour

Format	Interface	Recommended codec	Approx. bitrate (Mbps)	Approx. disk space (GB/hour)
DV	IEEE1394	Canopus DV	25	14 <sup>*3</sup>
DVCAM	IEEE1394	Canopus DV	25	14 <sup>*3</sup>
DVCPRO 25	—	—	25	14 <sup>*3</sup>
DVCPRO 50	IEEE1394	DVCPRO50	50	28 <sup>*4</sup>
Betacam	Analog component	Canopus Lossless	VBR (varies depending on image)	—
		Uncompressed D1	168	77 <sup>*3</sup>
		Canopus HQ	VBR <sup>*1</sup> (varies depending on image)	24 <sup>*1, *3</sup>
Digital Betacam	SDI	Canopus Lossless	VBR (varies depending on image)	—
		Uncompressed D1	168	77 <sup>*4</sup>
		Canopus HQ	VBR <sup>*1</sup> (varies depending on image)	24 <sup>*1, *4</sup>
HDV	IEEE1394	Canopus HQ	VBR <sup>*2</sup> (varies depending on image)	102 <sup>*2, *3</sup>
HDCAM	HD-SDI	Canopus HQ	VBR <sup>*2</sup> (varies depending on image)	102 <sup>*2, *4</sup>
DVCPRO HD	HD-SDI /IEEE1394	DVCPRO HD	100	55 <sup>*5</sup>

<sup>\*1</sup> Canopus HQ(720x486) Online (Standard) image quality, maximum bitrate in default mode = 50.4 Mbps

<sup>\*2</sup> Canopus HQ (1440x1080) Online (Standard) image quality, maximum bitrate in default mode = 225 Mbps

<sup>\*3</sup> Audio bitrate 48kHz/16bit/2ch

<sup>\*4</sup> Audio bitrate 48kHz/16bit/4ch

<sup>\*5</sup> Audio bitrate 48kHz/16bit/8ch

\* DVCPRO 25 cannot be handled as IEEE1394 stream.

# 3 Preset List

## Editing profile

### Generic OHCI SD NTSC

Preset	Codec	Video Device	Note
DVCPR050 59.94i 4:3	DVCPR050	DVCPRO 50	*1
DVCPR050 59.94i 16:9		DVCPRO 50	*1
DV 59.94i 4:3, 48kHz	Canopus DV		
DV 59.94i 4:3, 44.1kHz			
DV 59.94i 4:3, 32kHz 2ch			
DV 59.94i 4:3, 32kHz 4ch			
DV 59.94i 16:9, 48kHz		AG-DVX100, etc.	
DV 59.94i 16:9, 44.1kHz		AG-DVX100, etc.	
DV 59.94i 16:9, 32kHz 2ch		AG-DVX100, etc.	
DV 59.94i 16:9, 32kHz 4ch		AG-DVX100, etc.	
DV 29.97p over 59.94i 4:3, 48kHz		AG-DVX100, etc.	
DV 29.97p over 59.94i 16:9, 48kHz		AG-DVX100, etc.	
HDV 480/59.94p 16:9	Canopus HQ	HDV (JVC)	

#### POINT

- \*1 The codec options are required.
- \* Model name listed here is an example.

## Generic OHCI SD PAL

Preset	Codec	Video Device	Note
DVCPR050 50i 4:3	DVCPR050	DVCPRO 50	*1
DVCPR050 50i 16:9		DVCPRO 50	*1
DV 50i 4:3, 48kHz	Canopus DV		
DV 50i 4:3, 44.1kHz			
DV 50i 4:3, 32kHz 2ch			
DV 50i 4:3, 32kHz 4ch			
DV 50i 16:9, 48kHz			
DV 50i 16:9, 44.1kHz			
DV 50i 16:9, 32kHz 2ch			
DV 50i 16:9, 32kHz 4ch			
DV 25p over 50i 4:3, 48kHz		AG-DVX100, etc	
DV 25p over 50i 16:9, 48kHz		AG-DVX100, etc	
HDV 576/50p 4:3	Canopus HQ	HDV (JVC)	
HDV 576/50p 16:9		HDV (JVC)	
HDV 576/25p 16:9		HDV (JVC)	

## Generic OHCI SD 24Hz

Preset	Codec	Video Device	Note
DV 23.98p over 59.94i 4:3, 48kHz	Canopus DV	AG-DVX100, etc	
DV 23.98p over 59.94i 16:9, 48kHz		AG-DVX100, etc	
DV 23.98pA over 59.94i 4:3, 48kHz		AG-DVX100, etc	
DV 23.98pA over 59.94i 16:9, 48kHz		AG-DVX100, etc	

## Generic OHCI HD 60Hz

Preset	Codec	Video Device	Note
Full HD 1080/59.94i	Canopus HQ	HDV (Sony/Canon)	
HDCAM/HDV 1080/59.94i		HDV (Sony/Canon)	
HDV 1080/29.97p		HDV (Canon)	
HDV 720/29.97p		HDV (JVC)	
DVCPRO HD 1080/59.94i	DVCPRO HD		*1
DVCPRO HD 1080/29.97p over 59.94i			*3
DVCPRO HD 720/59.94p			*2 or 3
DVCPRO HD 720/29.97p over 59.94p			*2 or 3

### POINT

\* Model name listed here is an example.

\*1 The codec options are required.

\*2 Available with the combination of Codec Option and Varicam Option.

\*3 Available with the combination of Codec Option and P2 Option.

## Generic OHCI HD 50Hz

Preset	Codec	Video Device	Note
Full HD 1080/50i	Canopus HQ	HDV (Sony/Canon)	
HDCAM/HDV 1080/50i		HDV (Sony/Canon)	
HDV 1080/25p		HDV (Canon)	
HDV 720/25p		HDV (JVC)	
DVCPRO HD 1080/50i	DVCPRO HD		*1
DVCPRO HD 1080/25p over 50i			*3
DVCPRO HD 720/50p			*2 or 3
DVCPRO HD 720/25p over 50p			*2 or 3
DVCPRO HD 720/50p over 60p			*2 or 3
DVCPRO HD 720/25p over 60p			*2 or 3

## Generic OHCI HD 24Hz

Preset	Codec	Video Device	Note
HDV 1080/23.98p	Canopus HQ	HDV (Canon)	
HDV 720/23.98p		HDV (JVC)	
DVCPRO HD 1080/23.98p over 59.94i	DVCPRO HD		*3
DVCPRO HD 1080/23.98pA over 59.94i			*3
DVCPRO HD 720/23.98p over 59.94p			*2 or 3
DVCPRO HD 720/24p over 60p			*2 or 3

## SHX-E1 SD NTSC

Preset	Codec	Video Device	Note
D1 59.94i 4:3	Uncompressed (YUY2)		
D1 59.94i 16:9			
DV 59.94i 4:3	Canopus DV		
DV 59.94i 16:9			
DV 29.97p over 59.94i 4:3		AG-DVX100, etc	
DV 29.97p over 59.94i 16:9		AG-DVX100, etc	

### POINT

\* Model name listed here is an example.

\*1 The codec options are required.

\*2 Available with the combination of Codec Option and Varicam Option.

\*3 Available with the combination of Codec Option and P2 Option.

## SHX-E1 SD PAL

Preset	Codec	Video Device	Note
D1 50i 4:3	Uncompressed (YUY2)		
D1 50i 16:9			
DV 50i 4:3	Canopus DV		
DV 50i 16:9			
DV 25p over 50i 4:3		AG-DVX100, etc	
DV 25p over 50i 16:9		AG-DVX100, etc	

## SHX-E1 SD 24Hz

Preset	Codec	Video Device	Note
DV 23.98p over 59.94i 4:3	Canopus DV	AG-DVX100, etc	
DV 23.98p over 59.94i 16:9		AG-DVX100, etc	
DV 23.98pA over 59.94i 4:3		AG-DVX100, etc	
DV 23.98pA over 59.94i 16:9		AG-DVX100, etc	

## SHX-E1 HD 60Hz

Preset	Codec	Video Device	Note
Full HD 1080/59.94i	Canopus HQ		
Full HD/HDV 720/59.94i			
Full HD/HDV 720/29.97i over 59.94p			
HDCAM/HDV 1080/59.94i			
HDV 1080/29.97p over 59.94i			
DVCPRO HD 1080/59.94i	DVCPRO HD		
DVCPRO HD 1080/29.97p over 59.94i			
DVCPRO HD 720/59.94p			
DVCPRO HD 720/29.97p over 59.94p			

**POINT** \* Model name listed here is an example.



# SHX-E1 HD 50Hz

Preset	Codec	Video Device	Note
Full HD 1080/50i	Canopus HQ		
Full HD/HDV 720/50p			
Full HD/HDV 720/25p over 50p			
HDCAM/DVCPRO HD/HDV 1080/50i			
DVCPRO HD/HDV 1080/25p over 50i	DVCPRO HD		
DVCPRO HD 720/50p			
DVCPRO HD 720/25p over 50p			

# SHX-E1 HD 24Hz

Preset	Codec	Video Device	Note
Full HD/HDV 720/23.98p over 59.94p	Canopus HQ		
HDV 1080/23.98p over 59.94i			
DVCPRO HD 1080/23.98p over 59.94i	DVCPRO HD		
DVCPRO HD 720/23.98p over 59.94p			

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# Input device

## Generic OHCI Input

Preset	Codec	Video Device	Note
DV 59.94i	Canopus DV		
DV 50i	Canopus DV		
DVCPRO HD 1080/59.94i	DVCPRO HD	DVCPRO HD	*1
DVCPRO50 59.94i	DVCPRO50	DVCPRO50	*1
DVCPRO HD 1080/50i	DVCPRO HD	DVCPRO HD	*1
DVCPRO50 50i	DVCPRO50	DVCPRO50	*1

## Generic HDV Input

Preset	Codec	Video Device	Note
Canopus HQ 1080/59.94i	Canopus HQ	HDV (Sony / Canon)	
Canopus HQ 1080/50i			
Canopus HQ 1080/29.97p		HDV (Canon)	
Canopus HQ 1080/23.98p over 59.94i			
Canopus HQ 1080/23.98pA over 59.94i			
Canopus HQ 1080/25p		HDV (JVC)	
Canopus HQ 720/29.97p			
Canopus HQ 720/23.98p over 59.94p			
Canopus HQ 720/25p			
Canopus HQ 480/59.94p			
Canopus HQ 576/25p			
Canopus HQ 576/50p			
MPEG TS 1080/59.94i		HDV (Sony / Canon)	*2
MPEG TS 1080/50i			*2
MPEG TS 720/29.97p		HDV (JVC)	*2
MPEG TS 720/23.98p over 59.94p			*2
MPEG TS 720/25p			*2

### POINT

- \*1 The codec options are required.
- \*2 Captures in MPEG TS format of HDV native.
- \* Model name listed here is an example.

## SHX-E1 Composite, S, Component

Preset	Codec	Video Device	Note
D1 (Uncompressed) 50i 4:3	Uncompressed (YUY2)		
D1 (Uncompressed) 50i 16:9			
D1 (Uncompressed) 59.94i 4:3			
D1 (Uncompressed) 59.94i 16:9			
DV 50i 4:3	Canopus DV		
DV 50i 16:9			
DV 59.94i 4:3			
DV 59.94i 16:9			
Canopus HQ 50i 4:3	Canopus HQ		
Canopus HQ 50i 16:9			
Canopus HQ 59.94i 4:3			
Canopus HQ 59.94i 16:9			
Canopus Lossless 50i 4:3	Canopus Lossless		
Canopus Lossless 50i 16:9			
Canopus Lossless 59.94i 4:3			
Canopus Lossless 59.94i 16:9			

## SHX-E1 DV

Preset	Codec	Video Device	Note
DV 50i	Canopus DV		
DV 59.94i			

### POINT

\* Model name listed here is an example.

